

BOX BUTTE COUNTY SCHOOL DISTRICT #07-0010
HEMINGFORD PUBLIC SCHOOLS
BOARD OF EDUCATION MEETING AGENDA
Tuesday, September 10, 2024
South Campus

The Board of Education of School District 07-0010 will meet on Tuesday, September 10, 2024 in the South Campus as duly advertised in the Alliance Times-Herald.

- I. Pledge of Allegiance
- II. Notices
- III. Call Meeting to Order
 - III.A. Roll Call
 - III.B. Excuse Absent Board Member(s)
- IV. Special Meeting Agenda
 - IV.A. Conduct a work session with Jack Baker (JEO) regarding a review of the school district facilities assessment and discussion regarding considerations/recommendations for ongoing facilities planning.
- V. Adjournment



Welcome to the Hemingford Public Schools Board of Education Meeting.

The board welcomes citizens to attend board meetings to become acquainted with the programs and operations of the district. Members of the public are also encouraged to share their ideas and opinions with the Board during the agenda item labeled "Public Comment". Comments or questions from the audience at any other time during the meeting except for the agenda item "Public Comment" will be declared out of order.

School board meetings are a meeting held in public; however, the meetings are not public meetings.

TALKING POINTS FOR BOARD MEETING

3 MINUTES PER INDIVIDUAL/30 MINUTES ON TOPIC

The board chair will recognize these individuals to make their comments at the appropriate time. Only those speakers recognized by the board chair shall be allowed to speak. Comments by others are out of order. If disruptive, the individual making the comments, or other individuals causing disruption may be asked to leave the board meeting.

The purpose of public participation is a forum for the public to provide information and be heard by the members of the board. By law, the board is not allowed to respond, discuss, or take action on items that are not included in the published agenda.

Any written or printed materials to be circulated for a meeting of the school board must be submitted to the superintendent by the **Thursday** preceding a Monday night meeting. (Per policy # 0204.12)

*If you want to speak, you must fill out a Public Comment Request Card. When you have completed this, please submit the card to the superintendent. The cards will be numbered as they are received by the superintendent. You will be called on, by the board president, according to the number on your completed Public Comment Request Card. The board president will signal when the speaker has 30 seconds remaining.

*By law, you must state your name, address, and we ask that you state the topic you are addressing, before you begin.

*If you are planning to speak about personnel or student matters involving an individual, please understand that our policies require that such concerns initially be directed to the administration for consideration. Board members **may not** respond to any questions you ask or comments you make about individual staff members or students.

+++++tear off+++++tear off+++++tear off+++++

Number	
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Hemingford School District—Board of Education
Public Comment Request Card
Name:
District resident: <input type="checkbox"/> Yes <input type="checkbox"/> No
Address:
City/State/Zip Code:
Agenda Item or Topic to address:
Signature:

Hemingford Public Schools

Annual Board of Education Calendar

Month	Budget	Curriculum	Personnel	Policy	Board Development	Other
January 5:00 PM			<ul style="list-style-type: none"> • Approve Negotiated Agreement with HEA (Upon Mutual Acceptance) • Appoint Superintendent as Authorized Representative for Federal, State, and Local Matters. 	<ul style="list-style-type: none"> • Adopt Board and Superintendent Goals • Review Board Member Code of Ethics • Review/Revise Policies 	<ul style="list-style-type: none"> • Discussion and/or Appointment of Board Committees • NASB Legislative Issues Conference • Community Engagement Session • Board Retreat/Workshop • Strategic Plan Review/Board Self-Assessment 	<ul style="list-style-type: none"> • Oath of Office • Board Officer Elections • Designate Depository • Designate Legal Firm • Designate Treasurer • Designate Auditor for the District • Review Report Required by State Statute 79-506
February 5:00 PM		<ul style="list-style-type: none"> • Review Report on Multicultural Education 	<ul style="list-style-type: none"> • Approve Negotiated Agreement with HEA (Upon Mutual Acceptance) 	<ul style="list-style-type: none"> • Review/Revise Policies 	<ul style="list-style-type: none"> • NASB Presidents' Retreat 	<ul style="list-style-type: none"> • Monitor Proposed Legislation
March 7:00 PM	<ul style="list-style-type: none"> • Review State Aid Certification (When Available) • Establish Technology Budget for Following Year 	<ul style="list-style-type: none"> • Curriculum Committee Review of Curriculum Materials Proposed for Adoption (as needed) • Committee on American Civics Meeting 	<ul style="list-style-type: none"> • Establish Salaries for Administrators • Approve Negotiated Agreement with HEA (Upon Mutual Acceptance) 	<ul style="list-style-type: none"> • Adopt Resolution Pertaining to Non-Resident Students • Review/Revise Policies 	<ul style="list-style-type: none"> • NRCSA Spring Conference 	<ul style="list-style-type: none"> • Discuss School Calendar • Monitor Proposed Legislation
April 7:00 PM	<ul style="list-style-type: none"> • Review State Aid Certification (When Available) 	<ul style="list-style-type: none"> • Consider Adoption of Curriculum and/or Textbooks for Subsequent Year 		<ul style="list-style-type: none"> • Review/Revise Policies 		<ul style="list-style-type: none"> • Adopt School Calendar • Review Report Required by State Statute 79-506
May 7:00 PM	<ul style="list-style-type: none"> • Review State Aid Certification (When Available) 	<ul style="list-style-type: none"> • Review Statewide Assessment Results (Writing) 		<ul style="list-style-type: none"> • Review/Revise Policies 	<ul style="list-style-type: none"> • Attend Graduation Ceremony 	

Hemingford Public Schools

Annual Board of Education Calendar

Month	Budget	Curriculum	Personnel	Policy	Board Development	Other
June 7:00 PM		<ul style="list-style-type: none"> Year End Assessment and Curriculum Review Review School Improvement Plan Committee on American Civics Meeting 	<ul style="list-style-type: none"> Superintendent Evaluation (end of year) 	<ul style="list-style-type: none"> Review Bullying Prevention Policy Approve Student, Athletic, and Staff Handbooks 	<ul style="list-style-type: none"> Board Self-Assessment and Goal Planning NASB School Law Seminar 	
July 7:00 PM	<ul style="list-style-type: none"> Budget Committee Work Session Review Budget Authority and Allowable Reserve Percentage Certification 	<ul style="list-style-type: none"> Review Summer School Program Report 		<ul style="list-style-type: none"> Student Fees Policy Parent Involvement Policy 	<ul style="list-style-type: none"> NASB School Finance Workshop Review NASB Board Awards of Achievement NASB School Law Workshop 	<ul style="list-style-type: none"> Adopt Board Goals Review Report Required by State Statute 79-506
August 7:00 PM	<ul style="list-style-type: none"> Review Proposed Budget Review Certifications of District's Assessed Valuation 				<ul style="list-style-type: none"> NASB Area Membership Meeting 	<ul style="list-style-type: none"> Facilities Tour
September 7:00 PM	<ul style="list-style-type: none"> Budget Hearing Adopt Budget Tax Request Hearing Approve Tax Request for Fund Levies 	<ul style="list-style-type: none"> Review ACT Results Review School Improvement Plan Review Statewide Assessment Results (Reading, Math, Science) 	<ul style="list-style-type: none"> Consider HEA Request for Recognition as Bargaining Agent (if delivered to Board) 		<ul style="list-style-type: none"> NASA/NASB Labor Relations Conference 	<ul style="list-style-type: none"> Review Statewide Assessment Results (when available)
October 7:00 PM	<ul style="list-style-type: none"> Review Fall Enrollment Figures Prepare for Negotiations 		<ul style="list-style-type: none"> Consider HEA Request for Recognition as Bargaining Agent 			<ul style="list-style-type: none"> Review Annual Emergency Safety Plan Review Report Required by State Statute 79-506
November 5:00 PM	<ul style="list-style-type: none"> Audit Committee Review of Audit Report 	<ul style="list-style-type: none"> Review District Annual Report 	<ul style="list-style-type: none"> Distribute/Complete Superintendent Evaluation Begin Negotiations 		<ul style="list-style-type: none"> NASB/NASA State Education Conference 	
December 5:00 PM	<ul style="list-style-type: none"> Approve Fiscal Year Audit Report 	<ul style="list-style-type: none"> Review School Improvement Plan 	<ul style="list-style-type: none"> Approve Negotiated Agreement with HEA (Upon Mutual Acceptance))	<ul style="list-style-type: none"> Host Board/Staff Recognition Dinner

Hemingford Public Schools

Annual Board of Education Calendar

Month	Budget	Curriculum	Personnel	Policy	Board Development	Other
	(November or December)		<ul style="list-style-type: none">• Superintendent Evaluation			

Revised February 2023



HEMINGFORD PUBLIC SCHOOLS

HEMINGFORD, NEBRASKA

FE #24100012

AUGUST 22, 2024

FACILITY ASSESSMENT & ENERGY AUDIT

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PROTECTION & TECHNOLOGY SYSTEMS



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PART 1 - PROJECT DESCRIPTION

1.1 PURPOSE

- A. The purpose of this study is to survey and assess the mechanical, electrical, plumbing, and fire protection systems infrastructure for the Hemingford Public Schools facilities. Included in the scope of the assessment is to identify deficiencies within the building, improve efficiency for staff, assist with forecasting major system replacements before equipment reaches end of life, and building project planning to support growth or improvements to the facility.
- B. Data was obtained through visual observation of the various systems, components, and elements within the building along with a review of existing facility drawings. In addition, interviews with maintenance and management personnel were conducted. A thorough observation of the systems was provided but some components and elements could not be observed without the destruction of ceilings, walls, etc.
- C. The analysis of mechanical equipment focused on primary heating and cooling components, major air handling and ventilation equipment, temperature controls, plumbing piping and water heating and treatment equipment, and fire protection systems.
- D. The analysis of electrical equipment focused on the main electrical service, electrical distribution, life safety equipment, and communication systems.

1.2 ABOUT FARRIS ENGINEERING

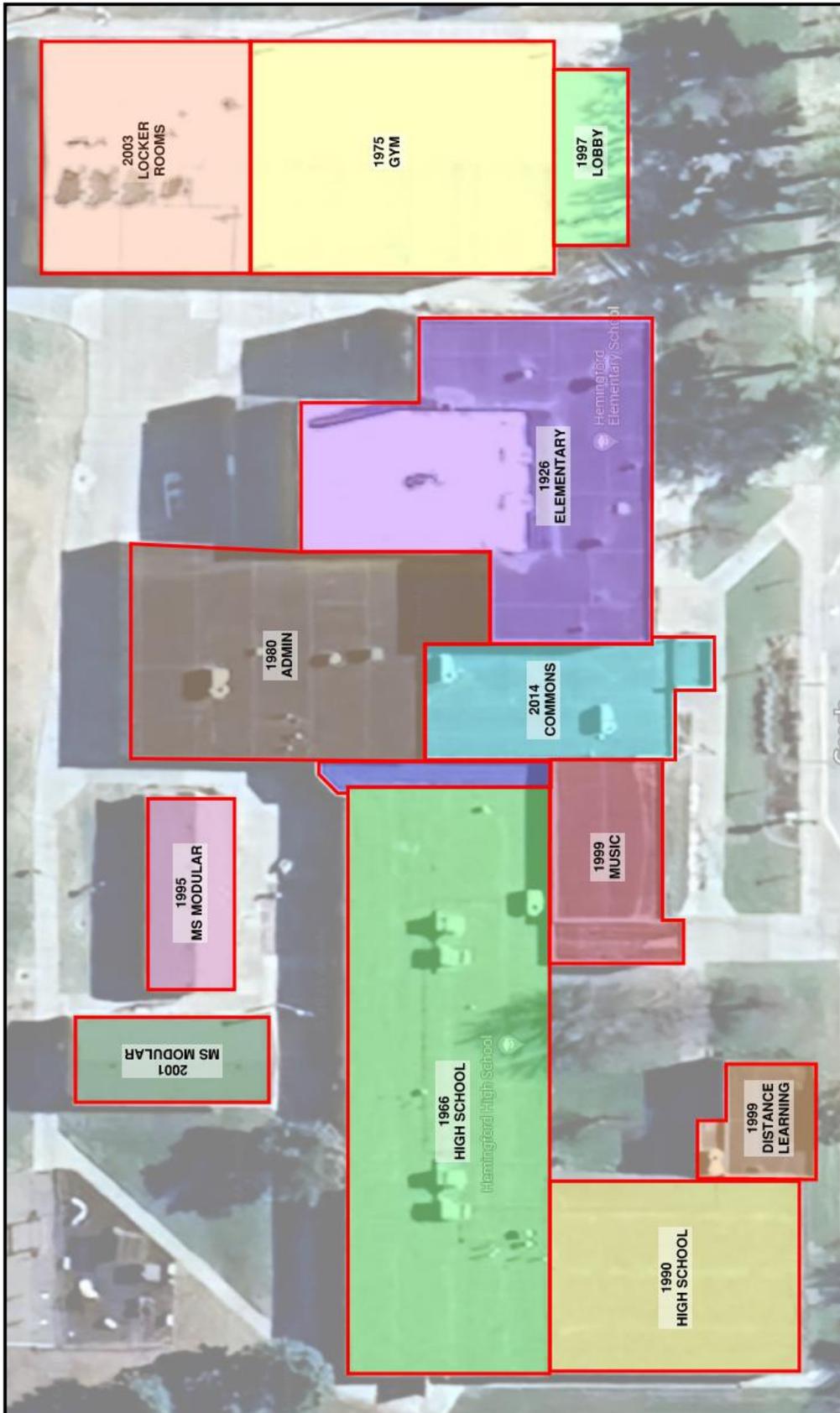
- A. Farris Engineering's mechanical and electrical professionals listen to client needs and focus on cost, safety, reliability, and impact. The result, since 1967: Engineering excellence. Other firm services include fire protection, lighting design, technology, and commissioning, with offices in Omaha, NE, Lincoln, NE, Sidney, NE, Colorado Springs, CO, and Kansas City, MO. Project categories include K-12, healthcare, higher education, military, government, industrial and commercial.
- B. Farris Engineering performed this facility assessment as an engineering consultant to JEO (Scottsbluff, Nebraska).

PART 2 - BUILDING DESCRIPTION

- A. The facilities included in this assessment are the Hemingford Public School facilities located in Hemingford, Nebraska.

- B. The original school building shown in purple in the image below was built in 1926 but has had multiple major additions. The primary areas of the facility are separated as follows:
 - 1. Main School Building
 - a. 1926 Elementary
 - b. 1966 High School
 - c. 1980 Administration
 - d. 1990 High School Addition
 - e. 1999 Music
 - f. 1999 Distance Learning
 - g. 2014 Commons

- C. Additional campus buildings include the following:
 - 1. Gymnasium
 - a. Original 1975 Building
 - b. 1997 Lobby Addition
 - c. 2003 Locker Room Addition
 - 2. 1995 Middle School Modular
 - 3. 2001 Middle School Modular
 - 4. Ag Shop
 - 5. Maintenance Shop
 - 6. Greenhouse
 - 7. Football/Crow's Nest
 - 8. Concessions Building
 - 9. Bus Barn
 - 10. Multipurpose Room
 - 11. South Campus Building



PART 3 - MECHANICAL SYSTEMS

3.1 CENTRAL UTILITY PLANT

A. General:

1. The central utility plant only serves the original 1926 Elementary School portion of Main School Building and is configured as a two-pipe changeover system. It is capable of either heating or cooling, but simultaneous heating and cooling are not possible, and the system cannot be changed between modes of operation quickly due to the potential for thermal shock and damage to the system.
2. Two (2) constant volume vertical inline pumps installed in parallel configuration circulate the hot/chilled water through the facility. Each pump is rated at 2 hp. The pumps appeared to be in marginal condition and have exceeded their expected 10-year service life.



B. Chilled Water:

1. A Daikin air-cooled chiller installed circa 2018 provides chilled water for the facility. The chiller has two (2) 15-ton sealed hermetic, scroll type compressors for a nominal cooling capacity of 30 tons.
2. The chiller has a constant volume vertical inline pump rated at 2 hp. The pump appeared to be in marginal condition and has exceeded its expected 10-year service life.



C. Hot Water:

1. Heating hot water for the facility is generated by two (2) Peerless natural gas fired cast iron boilers with a maximum input of 840 MBH with a 2:1 turndown capability and an 80% thermal efficiency rating. The boilers were installed circa 2000. The boilers appear to be in acceptable condition with occasional maintenance issues but are at the end of their expected 25-year service life. Each boiler has a constant volume inline circulator pump.

3.2 AIR HANDLING & TERMINAL EQUIPMENT

A. Main School Building:

1. 1926 Elementary: This area is served by 2-pipe floor console style fan coil units (FCUs). The FCUs are relatively simple and reliable. However, they do not provide uniform air distribution through the space served which results in poor occupant thermal



comfort. Additionally, floor console style FCUs generally output higher noise levels which can interrupt teaching activities as compared to traditional ducted HVAC systems.

2. 1966 High School: This area is served by four (4) packaged rooftop units (RTUs) with direct expansion (DX) cooling and natural gas heat exchangers. The RTUs were installed circa 2001 and have exceeded their expected 15-year service life.



3. 1980 Administration: This area is served by a combination of a packaged RTU and two (2) vertical FCUs with DX cooling, remote air-cooled condensing units (ACCUs), and natural gas heat exchangers. The RTU was installed circa 2001 as has exceeded its expected 15-year service life. The blower/furnace sections of the FCUs appear to have been installed circa 2001. One of the DX coils and remote ACCUs was installed circa 2003 and the other in 2021. While the equipment is aged, maintenance staff have done an excellent job of repairing and replacing components as necessary for proper operation.

4. 1990 High School Addition: This area is served by one (1) ductless split system and two (2) vertical FCUs with DX cooling, remote air-cooled condensing units (ACCUs), and natural gas heat exchangers. The blower/furnace sections of the FCUs appear to have been installed circa 2001. One of the DX coils and remote ACCUs was installed in 2022 and the other in 2023. While the equipment is aged, maintenance staff have done an excellent job of repairing and replacing components as necessary for proper operation. The ductless split system serves Classroom/Computer Lab 420. While the exact age is unknown, it appears to be in marginal condition and has likely exceeded or is nearing its expected 15-year service life.

5. 1999 Music: This area is served by a packaged rooftop unit (RTU) with direct expansion (DX) cooling and a natural gas heat exchanger. The RTU was installed circa 1999 and has exceeded its expected 15-year service life.

6. 1999 Distance Learning: This area is served by a packaged rooftop unit (RTU) with direct expansion (DX) cooling and a natural gas heat exchanger. The RTU was installed circa 1999 and has exceeded its expected 15-year service life.

7. 2014 Commons: This area is served by two (2) packaged rooftop units (RTUs) with direct expansion (DX) cooling and natural gas heat exchangers. The RTUs were installed in 2014 and appear to be in acceptable condition.



B. Gymnasium:

1. Original 1975 Building: This area is served by four (4) gas fired unit heaters. There is no means of mechanical cooling for the gym. Ventilation is provided by a sidewall propellor exhaust fan and makeup louver.
2. 1997 Lobby Addition: The lobby and concessions areas are served by a vertical FCU with a natural gas heat exchanger installed in 2020. There are no means of mechanical cooling in these areas.
3. 2003 Locker Room Addition: This area of the building is served by a packaged RTU with DX cooling and natural gas heating for the stage and three (3) heating only makeup air units (MAUs) to serve the locker rooms and wrestling room. All equipment was installed in 2003 and has exceeded its expected 15-year service life.



- C. 1995 Middle School Modular: This building is served by a wall mount packaged terminal air conditioner (PTAC) that appears to be original to the manufactured building.
- D. 2001 Middle School Modular: This building is served by a vertical FCU with DX cooling, remote ACCU, and a natural gas heat exchanger. The FCU and ACCU appear to be original to the manufactured building.
- E. Ag Shop: This building is served by a vertical FCU with natural gas heat and multiple natural gas fired radiant tube heaters. All equipment appears to be in fair condition. There is no means of mechanical cooling in this building.
- F. Maintenance Shop: This shop is heated by a single natural gas fired unit heater that appears to be in good condition. There is no means of mechanical cooling in this building.
- G. Greenhouse: This building is served by a gas fired unit heater. There is no means of mechanical cooling for the greenhouse. Ventilation is provided by a sidewall propellor exhaust fan and makeup louver.
- H. Football/Crow's Nest: There is no HVAC system present in this building.
- I. Concessions Building: This building is heated by multiple electric unit heaters that appear to be in good condition. An electric cove heater has been provided in the plumbing chase area.
- J. Bus Barn: There is no HVAC system present in this building.
- K. Multipurpose Room: The main portion of this building is heated by multiple natural gas fired radiant tube heaters. There is no means of mechanical cooling in this building.
- L. South Campus Building: This building is served by a vertical FCU with DX cooling, remote ACCU, and a natural gas heat exchanger along with a ductless split system. The ductless split system was installed circa 2020 and is in good condition. The vertical FCU and ACCU were installed circa 2007 and have exceeded their expected 15-year service life.



3.3 DISTRIBUTION

- A. It appears that some pipe and equipment insulation present in the facility may have asbestos containing materials. Asbestos is a silicate mineral that can cause serious and fatal illnesses such as lung cancer and mesothelioma after prolonged inhalation. Further investigation by professionals trained in the detection and abatement of asbestos is recommended.

3.4 TEMPERATURE CONTROL SYSTEM

- A. There is not a building management and control system present at this facility. Temperature control is provided via local thermostats.

3.5 MISCELLANEOUS

- A. Radon Gas: Based on the age and condition of the facility, there is a possibility that excessive radon gas levels exist in certain areas of the building. Radon is a colorless, odorless, tasteless gas that increases the risk of lung cancer after prolonged inhalation of high concentrations. Further investigation by professionals trained in the detection and mitigation of radon gas is recommended.

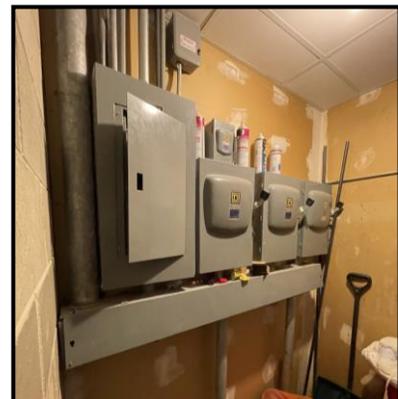
PART 4 - ELECTRICAL SYSTEMS

4.1 POWER SERVICE

A. Main School Building:

1. The existing main school building is served by three utility services installed at varying times as additions and expansion of the facilities occurred. The utility services are located on the north side of the building, at varying locations.
2. 1926 Elementary: This area of the building is served by an overhead electrical service, via weatherhead. The electrical service is 400 amp, 120/208 volt, three phase, four wire electrical service via a 400 amp Siemens S3 panelboard, manufactured in 2001. This panelboard is located on the exterior of the building and is not original to the elementary building. The panelboard does have existing space, but limited, for future electrical connections.
3. 1966 High School: This area of the building is served by an underground electrical service, via a pad mount transformer, located adjacent to the main distribution panel. The electrical service is 1200 amp, 120/208 volt, three phase, four wire electrical service via a 1200 amp Cutler Hammer PRL4 distribution panelboard, manufactured in 2001. The panelboard does have existing breakers indicated as spare, but limited, for future electrical connections.
4. 1980 Administration: This area of the building is served by an overhead electrical service, that is routed below ground. The electrical service is 400 amp, 120/208 volt, three phase, four wire electrical service via a 400 amp Gould ITE general duty safety switch. The existing equipment appears to be original to the 1980 addition and is reaching end of life.
5. 1990 High School Addition: This area of the building is served by the 1966 High School electrical service.
6. 1999 Music Addition: This area of the building is served by the 1966 High School electrical service.
7. 1999 Distance Learning Addition: This area of the building is served by the 1966 High School electrical service.
8. 2014 Commons: This area of the building is served by the 1966 High School electrical service.

B. Gymnasium: The existing building is served by an overhead electrical service on the east side of the building



via pole mounted transformers and weatherhead. The electrical service is 600 amp, 120/240 volt, single phase, three wire via an electrical gutter box with three 200 amp Square D fusible disconnect switches. The equipment doesn't appear to be from the original 1975 building, but perhaps from an addition project in 1997 and is reaching end of life.

- C. 1995 Middle School Modular: The existing building is served by a 200 amp breaker in the exterior main distribution panel serving the 1966 high school. The electrical service is 200 amp, 120/240 volt, single phase, three wire via a Westinghouse Load Center. The equipment appears to be from the original construction.
- D. 2001 Middle School Modular: The existing building is served by a 200 amp breaker in the exterior main distribution panel serving the 1966 high school. The electrical service is 200 amp, 120/240 volt, single phase, three wire via a GE Load Center. The equipment appears to be from the original construction.
- E. Ag Shop: The existing building is served by an overhead electrical service on the east side of the building via pole mounted transformer and weatherhead. The electrical service is 200 amp, 120/208 volt, three phase, four wire electrical service via a 225 amp Square D NQOD panelboard which appears to be original to the building. This panelboard is located in the interior of the building in a storage room. The panel does not appear to have any spare or future capacity available.
- F. Maintenance Shop: The existing building is served by an overhead electrical service on the north side of the building via pole mounted transformer and weatherhead. The electrical service is 200 amp, 120/240 volt, single phase, three wire via a Siemens Load Center. The equipment appears to be from the original construction. The load center does have spare breakers and capacity for future electrical connections.
- G. Greenhouse: The existing building is served by the same overhead electrical service that is on the maintenance shop by an underground conduit into a load center within a storage shed. The electrical service is 100 amp, 120/240 volt, single phase, three wire via a Square D Load Center. The equipment appears to be from the original construction. The load center does have capacity for future electrical connections.
- H. Football/Crow's Nest: The existing field and crow's nest is served by an overhead electrical service on the south side of the field via pole mounted transformer. The electrical service is 400 amp, 120/208 volt, three phase, four wire via a Siemens S3 panelboard, manufactured in 2001. This panelboard is located adjacent to the pole with the electrical service. The panelboard does have existing space, but limited, for future connections. The crow's nest is served by the same panelboard serving the field lighting by a 100 amp breaker. There is a load center located within the first level of the crow's nest that is served by this breaker. The electrical service to the crow's nest is 100 amp, 120/208 volt, single phase, three wire via a 100 amp Square D QO Load Center. The equipment appears to be from the original construction. The load center has existing space, but limited, for future electrical connections.
- I. Concessions Building: The existing building is served from a sub-panel that is located at the northwest field lighting pole by a 100 amp breaker. There is a load center within the



concessions building that is served by this breaker. The electrical service is 100 amp, 120/208 volt, three phase, four wire via a Siemens Load Center. The equipment appears to be from the original construction. The load center does not have any space for future electrical connections.

- J. Bus Barn: The existing building is served by an overhead electrical service on the north side of the building via pole mounted transformer and weatherhead. The electrical service is 200 amp, 120/240 volt, single phase three wire electrical service via a 200 amp Square D NQOD panelboard which appears to be original to the building. This panelboard is located in the interior of the building along the north wall.
- K. Multipurpose Room: The existing building is served by an overhead electrical service on the south side of the building via pole mounted transformer and weatherhead. The electrical service is 200 amp, 120/240 volt, single phase, three wire via a 200 amp Square D QO Load Center. The equipment appears to be from the original construction. The load center has existing space, but limited, for future electrical connections.
- L. South Campus Building: The existing building is served by an overhead electrical service on the south side of the building via pole mounted transformer and weatherhead. The electrical service is 400 amp, 120/240 volt, single phase, three wire via two 200 amp Siemens S3 panelboards. The equipment appears to be from the original construction. The two panelboards have existing space for future electrical connections.



4.2 POWER DISTRIBUTION

- A. Main School Building:
 1. The existing main school building has electrical power distributed throughout at 120/208 volt. The facility has a mix of panel manufacturers and years of installation,
 2. 1926 Elementary: This area of the building is served by 120/208 volt panels. The panels are Siemens ITE Load Centers that have been installed in the corridors within older existing panelboard enclosures. They appear in newer condition and have space capacity for future electrical connections. However, since they are recessed in corridor walls, being able to add additional loads will be dependant on gaining access to interior walls above panels. The elementary also has a newer Square D QC Load Center that was installed more recently in the basement area and has spare capacity for future electrical loads.
 3. 1966 High School: This area of the building is served by 120/208 volt panels. The panels are a mixture of electrical panel manufacturers and years of installation. It is believed that the original panels were replaced around 2001 when the electrical service was revised, and new Cutler Hammer panelboards were installed. These panels are either full or have very limited spare capacity for any future electrical connections. There is also a Square D load center that has very limited space capacity for any future electrical connections.
 4. 1980 Administration: This area of the building is served by 120/208 volt panels. The panels are a mixture of panel manufacturers and years of installation. The original panels, from 1980, are Gould ITE series 8 panelboards and have no existing space capacity for future electrical connections. This equipment is reaching end of life. A newer

Square D load center and Siemens panels have been added over time for additional air conditioning equipment and technology needs. These panels appear to be in newer condition and have space capacity for future electrical connections.

5. 1990 High School: This area of the building is served by 120/208 volt panels. The panels are a Siemens ITE Load Center, that was installed during the construction of the addition and a Siemens Load Center that was installed more recently. The older load center has no spare capacity, while the new load center does have space capacity, but due to load serves would need additional confirmation to determine if there is amperage capacity on the panel.
 6. 1999 Music Addition: This area of the building is served by the load centers that were installed in the 1966 High School.
 7. 1999 Distance Learning Addition: This area of the building is served by the load centers that were installed in the 1990 High School.
 8. 2014 Commons: This area of the building is served by a 120/208 volt panel. The panel is a Siemens Load Center. This panel is in newer condition but does not have space capacity and is not installed to meet NEC code required working clearances.
- B. Gymnasium: The existing building has a mixture of electrical panel manufacturers and years of installation. The manufacturers (and the areas of the building they are found in) include:
1. Square D (Original 1975 building, replaced in 1997 with lobby addition)
 2. Siemens (2003 Locker room addition)
 3. Cutler Hammer (2003 locker room addition)
- C. 1995 Middle School Modular. The modular building has one electrical load center which serves the entire building and is manufactured by Westinghouse.
- D. 2001 Middle School Modular: The modular building has only one electrical load center which serves the entire building and is manufactured by GE.
- E. Ag Shop: The building has one main electrical panelboard which serves the entire building and then a sub-panel load center located within the shop area that serves the larger shop equipment. All equipment is manufactured by Square D.
- F. Maintenance Shop: The building has one electrical load center which serves the entire building and is manufactured by Siemens.
- G. Greenhouse: The building has only one electrical load center, located within a storage shed, which serves the structure. The load center is manufactured by Square D.
- H. Football/Crow's Nest: The existing field and crow's nest is served by 120/208 volt panels. The panels are a mixture of panel manufacturers and potential years of installation. The base of each field lighting pole has another load center that serves the lights for the pole. The main service panel is manufactured by Siemens, the panels at the base of the field light poles and the load center within the crow's nest are manufactured by Square D.
- I. Concessions Building: The building has one electrical load center, located within the concessions room. The load center is manufactured by Siemens.



- J. Bus Barn: The building has one electrical load center, located along the north wall of the interior of the building.
- K. Multipurpose Room: The building has one main electrical load center which serves the entire building and then a sub-panel load center located at the stage portion of the building which serves stage loads. Both load centers are manufactured by Square D.
- L. South Campus Building: The building has two services, one for each 200 amp 120/240 volt panel where the service comes into a shared electrical gutter box. Both panelboards are manufactured by Siemens.

4.3 LIGHTING

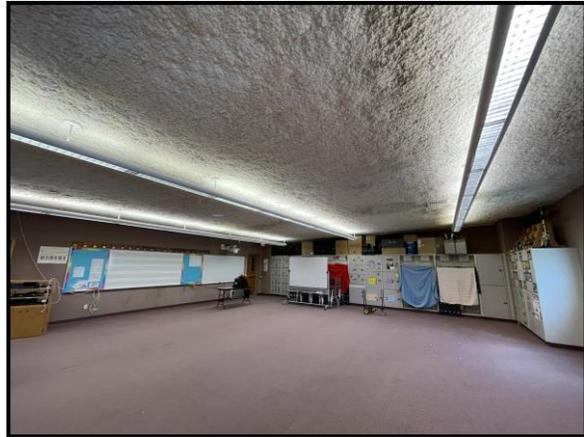
A. Main School Building

1. The existing main school building lighting throughout is a mix of LED, fluorescent, incandescent lamps, and metal halide. Some of the buildings have had automatic lighting controls provided but many areas do not have automatic lighting controls and do not meet current energy code requirements for lighting controls.
2. 1926 Elementary: The existing lighting in the corridors is recessed lensed LED troffers. The corridors utilize the troffers for night lighting. The existing lighting in the classrooms is either recessed lensed LED troffers or recessed architectural volumetric LED troffers. Some of the classrooms have ceiling mounted occupancy sensors for automatic lighting controls. The gymnasium lighting consists of suspended high bay fluorescent lighting with surface conduit from what appears to be original lighting locations that were replaced by the high bays. The basement areas of the elementary school are lensed fluorescent wrap that are surface mounted and screw base incandescent lamp sockets. Storage, mechanical, and electrical rooms have fluorescent strip lighting. The exterior lighting appears to be metal halide. Other than the few classrooms, no other areas appear that the lighting controls within the area meet current energy code requirements for automatic lighting control. Some of the lighting had fabric draped over the lighting to help soften the output of the lighting.
3. 1966 High School: The existing lighting in the corridors is lensed fluorescent wraps that are surface mounted. The restrooms have been remodeled and have recessed architectural volumetric LED troffers and ceiling mounted occupancy sensor. The existing lighting in the classrooms are architecturally lensed fluorescent wraps that are surface mounted. The classrooms have multizone manual switching and some have ceiling mounted occupancy sensors. The mechanical and electrical rooms have screw based incandescent lamp sockets. The exterior lighting appears to be metal halide. Other than the few classrooms and restrooms, no other areas appear that the lighting controls within the area meet current energy code requirements for automatic lighting control.

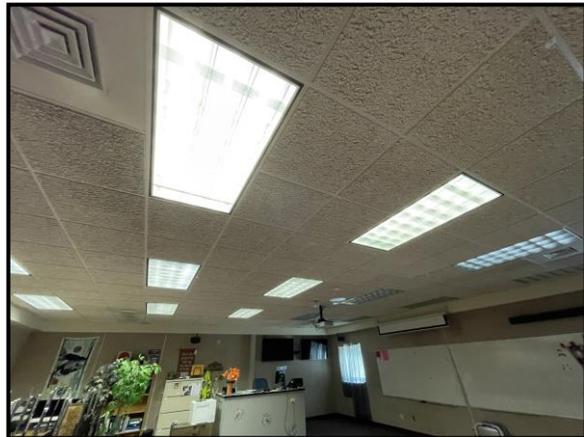


4. 1980 Administration: The existing lighting in the cafeteria is recessed lensed fluorescent troffers and lensed fluorescent wraps that are surface mounted. The kitchen has recessed sealed fluorescent troffers for the existing lighting. The existing lighting in the corridors, classrooms, restrooms, and tech work rooms are recessed lensed fluorescent troffers. The mechanical and electrical rooms have screw based incandescent lamp sockets. The exterior lighting appears to be metal halide. Other than the computer classroom, no other areas appear that the lighting controls within the area meet current energy code requirements for automatic lighting control.
5. 1990 High School: The existing lighting in the corridors and the classrooms are recessed lensed fluorescent troffers. Some of the classrooms have ceiling mounted occupancy sensors. The mechanical and electrical rooms have screw based incandescent lamp sockets. The exterior lighting appears to be metal halide. Other than the few classrooms, no other areas appear that the lighting controls within the area meet current energy code requirements for automatic lighting control.

6. 1999 Music Addition: The existing lighting in the corridors is recessed lensed fluorescent troffers. The music classroom existing lighting is comprised of suspended linear fluorescent lighting and does have ceiling mounted occupancy sensor. The existing lighting in the office consists of recessed parabolic fluorescent troffers. Other than the music classroom, no other areas appear that the lighting controls within the area meet current energy code requirements for automatic lighting control.



7. 1999 Distance Learning Addition: The existing lighting in the distance learning classroom and work room consists of recessed parabolic fluorescent troffers. The distance learning classroom has a ceiling mounted occupancy sensor. The existing lighting in the storage and restroom consists of recessed fluorescent troffers. Other than the distance learning classroom, no other areas appear that the lighting controls within the area meet current energy code requirements for automatic lighting control.



8. 2014 Commons: The existing lighting in the commons area is suspended linear LED lighting. The offices, work areas, and corridors are architectural volumetric LED troffers. The exterior lighting appears to be metal halide. These areas do not appear that the lighting controls within the area meet current energy code requirements for automatic lighting control.

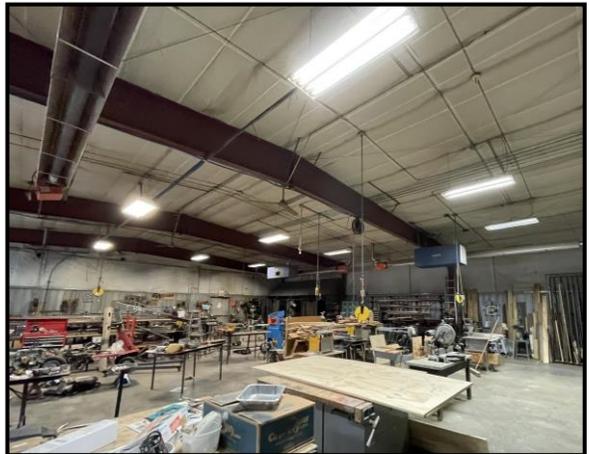
B. Gymnasium: The existing lighting throughout the facility is comprised of a mix of fluorescent, incandescent lamps, and metal halide. The lobby, locker rooms, concessions, restrooms, corridors, wrestling room, gymnasium, janitor closet, and weightlifting room are fluorescent lighting. The storage, mechanical, and electrical rooms are screw base incandescent lamp sockets. The exterior wall packs appear to be metal halide and controlled via local photocell. It does not appear that the lighting controls within the facility meet current energy code requirements for automatic lighting control.

C. 1995 Middle School Modular: The existing lighting within the classroom area is a lensed fluorescent wrap that is surface mounted. The teacher's work room consists of fluorescent troffers and the restroom is compact fluorescent downlight. The exterior lighting is comprised of wall packs that appear to be metal halide and socket type jelly jar lights. The exterior lighting appears to be controlled via local photocell. It does not appear that the lighting controls within the building meet current energy code requirements for automatic lighting control.



D. 2001 Middle School Modular: The existing lighting within the classroom area and restroom is a lensed fluorescent wrap that is surface mounted. The exterior wall packs appear to be metal halide and controlled via local photocell. It does not appear that the lighting controls within the building meet current energy code requirement for automatic lighting control.

E. Ag Shop: The existing lighting throughout the building is fluorescent. The large shop area consists of suspended high bay fixtures. It does not appear that the lighting controls within the building meet current energy code requirements for automatic lighting control.



F. Maintenance Shop: The existing lighting throughout the building is linear fluorescent strip lights that are surface mounted. It appears that the lighting controls would comply with current energy code requirements due to the electrical load center being located within the room.

G. Greenhouse: The existing lighting within the structure consists of a couple lensed enclosed lamp sockets mounted to structure.

H. Football/Crow's Nest: The existing field lighting are floodlight type metal halide fixtures clustered at four poles, two poles are located on the north side and two poles on the south side of the field. The crow's nest has incandescent lamp type sockets. It does not appear that the lighting controls for the crow's nest meet current energy code requirements for automatic lighting control.

I. Concessions Building: The existing building lighting consists of linear fully enclosed/gasketed

- fluorescent fixtures that are surface mounted.
- J. Bus Barn: The existing building lighting consists of fluorescent high bays surface mounted to the roof structure. It does not appear that the lighting controls meet current energy code requirements for automatic lighting control.
 - K. Multipurpose Room: The existing lighting throughout the building is linear fluorescent strip lights that are surface mounted to gypsum ceiling or roof structure. It does not appear that the lighting controls meet current energy code requirements for automatic lighting control.
 - L. South Campus Building: The existing lighting throughout the building appears to have been recently upgraded to LED. The main meeting room, facility storage and mechanical rooms have LED flat panels, and the restrooms have LED downlights. The exterior wall packs appear to be upgraded to LED and are controlled via local photocell.

4.4 EMERGENCY LIGHTING

- A. Main School Building: Throughout all areas the emergency lighting is made up of a mixture of emergency battery backup ballasts/drivers and standalone wall and ceiling mounted emergency battery lighting units. No issues with coverage were reported by maintenance staff during site walkthrough. It is assumed that the existing emergency lighting meets the code required minimum 1 footcandle. No exterior emergency lighting was found to provide the code required exterior egress lighting.
- B. Gymnasium: The emergency lighting throughout the facility is comprised of selected lighting fixtures with emergency battery backup ballasts. No issues with coverage were reported by maintenance staff during site walkthrough. It is assumed that the existing emergency lighting meets the code required minimum 1 footcandle.
- C. 1995 Middle School Modular: The emergency lighting throughout the modular building is comprised of selected fixtures with emergency battery backup ballasts. No issues with coverage were reported by maintenance staff during site walkthrough. It is assumed that the existing emergency lighting meets the code required minimum 1 footcandle.
- D. 2001 Middle School Modular: The emergency lighting throughout the modular building is comprised of standalone wall mounted emergency battery lighting units. No issues with coverage were reported by maintenance staff during site walkthrough. It is assumed that the existing emergency lighting meets the code required minimum 1 footcandle.
- E. Ag Shop: The emergency lighting throughout the building is comprised of standalone wall mounted emergency battery lighting units. No issues with coverage were reported by maintenance staff during site walkthrough. It is assumed that the existing emergency lighting meets the code required minimum 1 footcandle.
- F. Maintenance Shop: It appears that the building does not have any emergency lighting.
- G. Greenhouse: It appears that the structure does not have any emergency lighting.
- H. Football/Crow's Nest: It appears that the field or the crow's nest does not have any emergency lighting.
- I. Concessions Building: It appears that the building does not have any emergency lighting.
- J. Bus Barn: The emergency lighting throughout the building is comprised of standalone wall

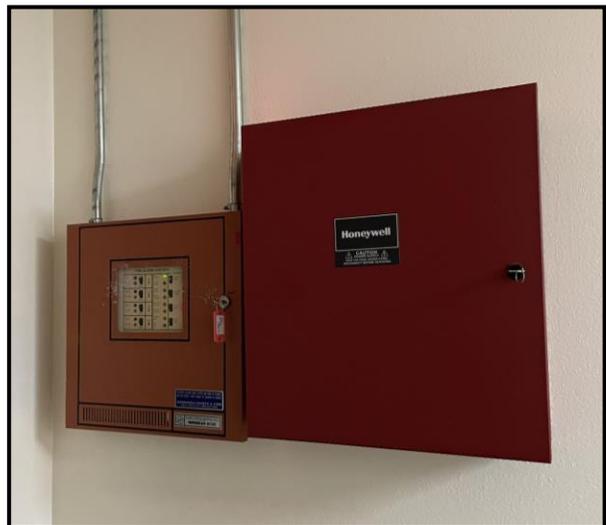
mounted emergency battery lighting units. No issues with coverage were reported by maintenance staff during site walkthrough. It is assumed that the existing emergency lighting meets the code required minimum 1 footcandle.

- K. Multipurpose Room: It appears that the building does not have any emergency lighting.
- L. South Campus Building: The emergency lighting throughout the facility is comprised of selected lighting fixtures with emergency battery backup. No issues with coverage were reported by maintenance staff during site walkthrough. It is assumed that the existing emergency lighting meets the code required minimum 1 footcandle.

4.5 FIRE ALARM

- A. Main School Building: The existing main school building has a range of existing fire alarm system equipment. Complete coverage for code minimum requirements for detection and notification was not done in detail. Without reviewing the system in an activated state, it was not able to determine how the different areas of the building interact or are connected together or if they operate separately. The existing fire alarm system consists of combination horn/strobes, horns, strobes, and bell notification devices, smoke detectors, and manual pull stations throughout the facility. Facility staff did not indicate any issues with the devices during the site walkthrough. Current codes would require a facility with an education occupancy to have a voice notification fire alarm system in lieu of a horn notification fire alarm system.

1. 1926 Elementary: This area of the building has a newer Notifier by Honeywell NFW2-100 fire alarm system panel. This area of the building still has what appears to be an original Notifier fire alarm panel. If the panel is inactive, it should be removed.
2. 1966 High School: This area of the building has a Fire Lite Alarms Miniscan 4024 fire alarm control panel. This area of the building still has what appears to be an original Notifier fire alarm panel. If the panel is inactive, it should be removed.
3. 1980 Administration: This area of the building has a Fire Lite Alarms Miniscan 4012 fire alarm control panel and a Honeywell fire alarm box. This area of the building has a fire sprinkler system that is connected to the fire alarm system.
4. 1990 High School Addition: The fire alarm devices for this area of the school were shown to be served by the fire alarm panel in the 1966 High School.



5. 1999 Music Addition: The fire alarm devices for this area of the school were shown to be served by the fire alarm panel in the 1966 High School.
 6. 1999 Distance Learning Addition: The fire alarm devices for this area of the school were shown to be served by the fire alarm panel in the 1966 High School.
 7. 2014 Commons: The fire alarm devices for this area of the school were shown to be served by the fire alarm panels in the 1980 Administration. This area of the building has a fire sprinkler system that is connected to the fire alarm system.
- B. Gymnasium: The existing facility is served by a Silent Knight conventional zoned system. The zones include gym north, sprinkler, and lobby pull stations. The Fire Alarm Control Panel (FACP) is located within the lobby. The date of installation of the FACP is unknown, but it appears to be functioning normally with no fault or trouble alarms present. There appears to be no exterior weatherproof horn/strobe above the Fire Department Connection (FDC).
- 
- C. 1995 Middle School Modular: The existing modular building is served by the main school building. The fire alarm horn strobe and pull stations appear to be original to the construction. Facility staff did not indicate any issues with the devices during the site walkthrough.
- D. 2001 Middle School Modular: The existing modular building is served by the main school building. The fire alarm horn strobe and pull stations appear to be original to the construction. Facility staff did not indicate any issues with the devices during the site walkthrough.
- E. Ag Shop: The existing building is served by a conventional zoned system. The date of installation of the FACP is unknown, but it appears to be functioning normally with no fault or trouble alarms present.
- F. Maintenance Shop: The structure does not have a fire alarm system.
- G. Greenhouse: The structure does not have a fire alarm system.
- H. Football/Crow's Nest: The crow's nest does not have a fire alarm system.
- I. Concessions Building: The structure does not have a fire alarm system.
- J. Bus Barn: The structure does not have a fire alarm system.
- K. Multipurpose Room: The structure does not have a fire alarm system.
- L. South Campus Building: The existing facility is served by a Notifier addressable system. The FACP is located in the back storage room near the panelboards. There is a Fire Alarm Annunciator Panel (FAAP) adjacent to the main building entry. The fire alarm system is not original to the building, but the date of installation is unknown.

4.6 SECURITY

- A. Main School Building: The existing facility utilizes DMP security with alarm keypads at several locations including the 1926 Elementary main entry area and the 1980 Administration old main entrance. The main head end equipment for security is located in the 1980 Administration tech work room. This equipment includes DMP, Brivo, and Altronix equipment and has monitoring equipment to monitor the security cameras. Security cameras are located to provide coverage of the exterior of the building, some main entry and lobbies, and gym. Card access-controlled doors include accessible exterior entrances.
- B. Gymnasium: The existing facility has card reader access at accessible exterior entrances. There is an exterior corner mounted camera and an interior mounted camera within the gymnasium. The headend equipment for these systems is located within the stage storage room. Brivo is used for the security system.
- C. 1995 Middle School Modular: The existing facility does not have any security or camera system.
- D. 2001 Middle School Modular: The existing facility does not have any security or camera system.
- E. Ag Shop: The existing facility does not have any security or camera system.
- F. Maintenance Shop: The existing facility does not have any security or camera system.
- G. Greenhouse: The existing structure does not have any security or camera system.
- H. Football/Crow's Nest: The crow's nest has an exterior mounted camera on the west and east side of the building. The headend equipment connection for the security system is located adjacent to the load center within a storage room and it appears that this system is connected back to the main school building system.
- I. Concessions Building: The existing facility does not have any security or camera system.
- J. Bus Barn: The existing facility has an exterior mounted camera along the east side of the building. It appears that the system is connected back to the main school building system.
- K. Multipurpose Room: The existing facility has a wireless Ring combination camera and flood light above the main building entrance. No other security or camera system appears to be present for the building.
- L. South Campus Building: The existing facility has a card reader system at the main entrance. There are multiple exterior mounted cameras that cover the front parking lot, the front canopy/walkway, and the overhead rolling door. Brivo is used for the security system and appears to be connected back to the main school building system.

4.7 INTERCOM PAGING/BELLS/CLOCKS

- A. Main School Building: The main intercom paging microphone control station is located in the administrative offices that were added in the 2014 Commons addition. The system is a Bogen system. The speakers throughout the building vary in style. Some areas, in particular newer construction, have ceiling mounted paging speakers. This



is found in some corridors, classrooms, and restrooms. Other older areas of the building have wall mounted speakers in combination with clocks. Some areas, like the elementary school, still have bells in the corridors. Classrooms with speakers do have wall intercom call stations. The elementary school has a Viking CTG-2A networked clock-controlled tone equipment.

- B. Gymnasium: Existing facility has a paging speaker system that connects back to the main school building headend system.
- C. 1995 Middle School Modular: Existing modular building has a paging speaker system with local call switch within classroom. The existing system is Bogen and connects back to the main school building headend system.
- D. 2001 Middle School Modular: Existing modular building has a paging speaker system with local call switch within classroom. The existing system is Bogen.
- E. Ag Shop: The existing facility does not have any paging speaker or bell systems.
- F. Maintenance Shop: The existing facility does not have any paging speaker or bell systems. The facility has an antennae system with headed equipment located along the interior north wall, which then has a pole mounted antennae located northeast of the building.
- G. Greenhouse: The existing structure does not have any paging speaker or bell systems.
- H. Football/Crow's Nest: The field has a broadcasting speaker system where speakers are mounted on the crow's nest building and on the field lighting poles. Headend equipment is located within the crow's nest announcement room. The facility staff did not indicate any issues with this system during site walkthrough.
- I. Concessions Building: The existing structure does not have any paging speaker or bell systems.
- J. Bus Barn: The existing structure does not have any paging speaker or bell systems.
- K. Multipurpose Room: The existing building has a sound system for the stage, the headend equipment is located within the storage room. The manufacturer of the system is Bogen.
- L. South Campus Building: The existing facility has a classroom sound system that is also interconnected to the main school building paging system.

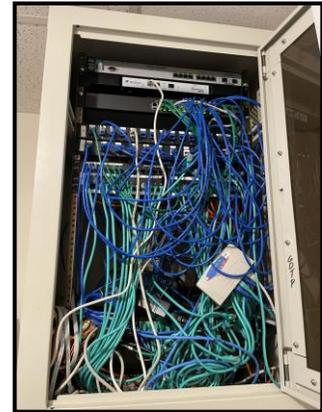
4.8 TELECOMMUNICATION

- A. Main School Building:
 - 1. The main school building's classrooms communication equipment includes both ceiling mounted projectors and short throw wall mounted projectors. Classrooms with ceiling mounted projectors primarily have manual pull down projector screens. The majority of classrooms also have a wireless access point (WAP) located in each room. Common spaces, such as cafeteria, commons, lobbies, and workout spaces have television monitors. A lot of the spaces have utilized surface mounted raceway for adding both telecommunication cabling and power throughout the building.
 - 2. 1926 Elementary: This area of the building has a wall mounted enclosed data rack and telephone terminal blocks located on the second floor office area to serve the rooms. The

building has an exterior telephone box to serve the building, that due to the 2014 Commons addition, is now in the main lobby of the commons area.

3. 1966 High School: This area of the building has exterior telecommunication pedestals and boxes by the main electrical service to bring in telecommunication services to the building. This area of the building has telephone terminal blocks and telecommunication equipment in the main mechanical/electrical room.

4. 1980 Administration: This area of the building has exterior telecommunication pedestals and boxes by the main electrical service to bring in telecommunication services to the building. The tech work room in this area of the building contains the main IT servers in an enclosed data rack. There is also a wall mounted enclosed data rack located off the nurse area to serve this area.



5. 1990 High School Addition: This area of the building is served by the 1966 High School area.

6. 1999 Music Addition: This area of the building is served by the 1966 High School area.

7. 1999 Distance Learning Addition: This area of the building is served by a dedicated wall mounted enclosed data rack for the distance learning equipment. The distance learning equipment includes projectors, television monitors, cameras, speakers, microphones, and computer equipment.



8. 2014 Commons: This area of the building has a wall mounted enclosed data rack and telephone terminal blocks located in storage room off the main office.

- B. Gymnasium: The building has an enclosed telecommunication cabinet in the storage room near the stage area to bring in telecommunication services to the building.

- C. 1995 Middle School Modular: The existing modular building has an enclosed telecommunication cabinet in the teacher's work room which is believed to be served by the nearest telecommunication room of the main school building.

- D. 2001 Middle School Modular: The existing modular building has an enclosed telecommunication cabinet in the teacher's work room which is believed to be served by the nearest telecommunication room of the main school building.

- E. Ag Shop: The existing facility does not have a telecommunication system.

- F. Maintenance Shop: The existing facility does not have a telecommunication system.

- G. Greenhouse: The existing facility does not have a telecommunication system.

- H. Football/Crow's Nest: The existing crow's nest building has a fiber entrance within the storage room, adjacent to the load center. A small patch panel is mounted above the fiber entrance that serves as the telecommunication system for the building. The fiber entrance also has a connection to the concessions stand.



- I. Concessions Building: The existing building has a fiber entrance within the plumbing chase/storage room of the building to serve the telecommunication system for the building. The fiber entrance also has a connection to the crow's nest.
- J. Bus Barn: The existing facility does not have a telecommunication system.
- K. Multipurpose Room: The existing building has wall mounted telecommunication equipment in the storage room, adjacent to the electrical load center, which brings in telecommunication services to the building.
- L. South Campus Building: The telecommunication demarcation and patch panel are located in the storage room, adjacent to the electrical panelboards, which serve the building.

PART 5 - PLUMBING SYSTEMS

5.1 SERVICES

A. Main School Building:

1. Domestic Water:

- a. A 1-1/2" domestic water service with a meter and backflow preventer is located in the 1980 Admin mechanical room and serves the entire main school building, except for the 1926 Elementary portion. The capacity and pressure of the service appear to be adequate for the existing facility.



- b. A 2" domestic water service with a meter and backflow preventer is located in the 1926 Elementary basement mechanical room. The capacity and pressure of the service appear to be adequate for the existing facility.



- c. Any substantial expansion would require investigation into an additional service and analysis of the available water pressure.

2. Sanitary Sewer: The facility has multiple sanitary sewer services with minimal documentation regarding routing and depth. Maintenance personnel reported significant concerns with the location, condition, and depth of the sanitary sewer piping.

3. Natural Gas:

- a. A natural gas service with a meter and pressure regulators is located on the east side of the 1926 Elementary Building and serves the entire main campus. The capacity and pressure of the service appears to be adequate for the existing facility.

- b. Downstream of the meter, the piping is routed underground to the various buildings requiring natural gas service on the campus, including the following:

- (1) 1966 High School
- (2) 1980 Administration
- (3) Gymnasium
- (4) 2001 Middle School Modular
- (5) Ag Shop

(6) Maintenance Shop

(7) Greenhouse

B. Gymnasium:

1. Domestic Water: A 1-1/2" domestic water service provides water for the entire facility. The capacity and pressure of the service appear to be adequate for the existing facility.
2. Sanitary Sewer: Similar to the Main School Building, the Gym has multiple sanitary sewer services with minimal documentation regarding routing and depth. Maintenance personnel reported significant concerns with the location, condition, and depth of the sanitary sewer piping.
3. Natural Gas: The building is served by the gas service located at the 1926 Elementary Building.

C. 1995 Middle School Modular:

1. Domestic Water: The building is served by the water service located at the 2001 Modular Building.
2. Sanitary Sewer: The sanitary sewer leaves the building to the south and then heads east and is routed below the 2014 Commons Building.
3. Natural Gas: There is not a natural gas service to this building.

D. 2001 Middle School Modular:

1. Domestic Water: A domestic water service is located on the west side of the facility with a meter installed in a pit and serves the 2001 Middle School Modular, 1995 Middle School Modular, and the Greenhouse.
2. Sanitary Sewer: The sanitary sewer leaves the building to the south and then heads east and is routed below the 2014 Commons Building.



3. Natural Gas: The building is served by the gas service located at the 1926 Elementary Building.

E. Ag Shop:

1. Domestic Water: A domestic water service with a meter is in the mechanical room. A backflow preventer is not present.
2. Sanitary Sewer: The sanitary sewer leaves the building to the east.
3. Natural Gas: The building is served by the gas service located at the 1926 Elementary Building.

- F. Maintenance Shop:
1. Domestic Water: There is not a domestic water service to this building.
 2. Sanitary Sewer: There is not a sanitary sewer service to this building.
 3. Natural Gas: The building is served by the gas service located at the 1926 Elementary Building.
- G. Greenhouse:
1. Domestic Water: The building is served by the water service located at the 2001 Modular Building.
 2. Sanitary Sewer: The drains in the Greenhouse are discharged into a drainage ditch north of the building.
 3. Natural Gas: The building is served by the gas service located at the 1926 Elementary Building.
- H. Football/Crow's Nest: There are no plumbing services for this building.
- I. Concessions Building:
1. Domestic Water: A 3/4" domestic water service enters the mechanical chase between the restrooms at this facility and is served by a meter and backflow preventer south of the building.
 2. Sanitary Sewer: A 1,500 gallon sanitary sewer holding tank northwest of the facility accommodates drainage from this building. The tank must be manually pumped out when required.
 3. Natural Gas: There is not a natural gas service to this building.
- J. Bus Barn: There are no plumbing services for this building.
- K. Multipurpose Room:
1. Domestic Water: A domestic water service is located in the northwest corner of the building with a meter and backflow preventer.
 2. Sanitary Sewer: The sanitary sewer service exits the north side of the building.
 3. Natural Gas: A natural gas meter and regulator are located on the south side of the building. The capacity and pressure of the service appear to be adequate for the existing facility.
- L. South Campus Building
1. Domestic Water: A 3/4" domestic water service with a meter and backflow preventer is located in the



mechanical room. The capacity and pressure of the service appear to be adequate for the existing facility.

2. Sanitary Sewer: A 4" sanitary sewer service exits the south side of the building to the alley.
3. Natural Gas: A natural gas meter and regulator are located on the south side of the building. The capacity and pressure of the service appear to be adequate for the existing facility.

5.2 TREATMENT SYSTEMS

A. Main School Building:

1. A simplex Culligan water softener treats the cold water inlet to the water heater in the 1966 High School mechanical room. The softener appears to be in acceptable condition.
2. A simplex Culligan water softener treats the cold water inlet to the water heater in the 1980 Admin mechanical room. The softener appears to be in acceptable condition.



B. Gymnasium: A simplex Culligan water softener treats the cold water inlet to the water heaters. The softener appears to be in acceptable condition.

C. 1995 Middle School Modular: There are no water treatment systems at this building.

D. 2001 Middle School Modular: There are no water treatment systems at this building.

E. Ag Shop: There are no water treatment systems at this building.

F. Greenhouse: There are no water treatment systems at this building.

G. Concessions Building: There are no water treatment systems at this building.

H. Multipurpose Room: There are no water treatment systems at this building.

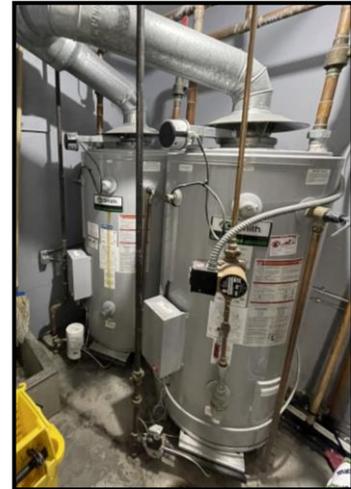
I. South Campus Building: There are no water treatment systems at this building.

5.3 HOT WATER GENERATION

A. Main School Building: The building is served by multiple water heaters of varying type and age throughout the facility, as listed below:

1. 1926 Elementary: Natural gas fired, tank style, installed 2021.
2. 1966 High School: Natural gas fired, tank style, installed 2022.

3. 1980 Admin:
 - a. Kitchen: Electric, tank style, installed 2015.
 - b. Mechanical Room: Natural gas fired, tank style, installed 2004.
4. 1990 High School: Electric, tank style, installed 1990.
5. 1999 Distance Learning: Electric, tank style, installed 2023.
- B. Gymnasium: The building is served by two natural gas fired, tank style water heaters that were installed in 2019.
- C. 1995 Middle School Modular: The building is served by an electric, tank style water heater that was installed in 2018.
- D. 2001 Middle School Modular: The building is served by an electric, tank style water heater that was installed in 2006.
- E. Ag Shop: The building is served by a natural gas fired, tank style water heater that was installed in 1990.
- F. Concessions Building: The building is served by an electric, tank style water heater that was installed in 2016.
- G. Multipurpose Room: A gas fired water heater serving the kitchen and restrooms is located in the northwest corner of the facility.
- H. South Campus Building: The building is served by an electric, tank style water heater located in the mechanical room and was installed in 2020.



5.4 DISTRIBUTION

- A. In general, the water piping in the facility did not appear to be a significant item of concern. However, there are areas that appear to have minor leaks and corrosion, and any galvanized water piping should be replaced with copper. Waste and vent piping were generally in acceptable condition but instances of poor to marginal conditions exist, especially in the older portions of the facility.
- B. Although not specifically reported by maintenance staff, based on the age of the facility, it is expected that many piping branches either do not have any means of isolation or the isolation valves leak which prevent area shutdowns.
- C. Damaged or missing piping insulation was identified during the assessment and was more prevalent in mechanical rooms. It is recommended that all damaged or missing pipe insulation is replaced.

5.5 FIXTURES

- A. Plumbing fixtures throughout the facilities that have not been replaced in recent years are



generally in marginal to poor condition, do not meet current ADA standards, and are high consumption units. This statement generally applies to areas of the facility that have not been renovated or constructed in the last 20 years. However, in many of the public restrooms, the fixtures have been replaced during remodels and meet current ADA standards.

- B. For any fixtures that may be in acceptable condition but are over 20 years old, it is recommended to replace accessories such as isolation valves, flexible piping, flush valves, trap insulation, etc.

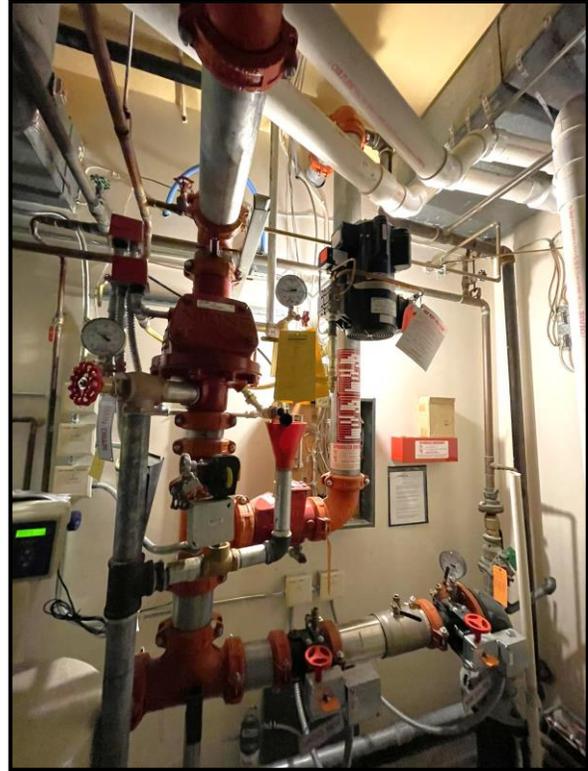
PART 6 - FIRE PROTECTION SYSTEMS

6.1 SERVICES

- A. A 4" fire protection water service is located in the 1980 Administration portion of the Main School Building. The service, backflow preventer, and appurtenances appear to be in acceptable condition.
- B. A fire protection water service is located in the 2003 Locker Room portion of the Gymnasium building. Access to the fire riser room was not possible due to a broken door lock.

6.2 DISTRIBUTION

- A. The Main School Building is equipped with a dry pipe automatic fire sprinkler system that appears to be designed in accordance with NFPA 13 but only serves a limited portion of the facility (1980 Administration and 2014 Commons). All other areas of the building are unprotected.
- B. The Gymnasium is equipped with an automatic fire sprinkler system that appears to be designed in accordance with NFPA 13 and provides protection for the entire facility.
- C. None of the other buildings were equipped with a fire protection system.



PART 7 - ENERGY AUDIT

7.1 AUDIT SCOPE AND METHODOLOGY

- A. The scope of the energy audit consisted approximately of an ASHRAE Level 2 energy audit. The effort involved an analysis of the existing building construction and a non-destructive visual site investigation of the major building systems. Energy conservation measures (ECM) have been proposed to potentially reduce the current energy consumption of the building. An energy audit analysis has been prepared detailing each ECM.

7.2 ENERGY AUDITOR EXPERIENCE

- A. The energy audit and associated calculations and report were performed by Danny VanDoren with Farris Engineering. Danny VanDoren is a registered mechanical engineer in the State of Nebraska and has performed over 25 similar energy audits over the last 10 years.



7.3 ENERGY AUDIT SUMMARY

- A. Farris was able to determine that there are several ECMs that could be enacted to reduce the energy usage/costs. Farris has analyzed three major ECMs that could achieve a potential total annual energy savings of 165,237 kWh and 3.966 therms, at an annual cost savings of \$25,258. Some of these ECMs may have overlapping effects, so the total savings of enacting all ECMs would likely not be as high as the sum of their individual savings.

7.4 ECM SUMMARY TABLE

- A. Section 8.7 of this report will go into further detail on each of these ECMs.

Energy Conservation Measures	Utility Rate Info			Estimated Annual Savings				Payback			
	Electric:	\$0.127	/kWh	Energy Savings (kWh)	Gas Savings (therms)	Electric Costs Savings	Gas Cost Savings	Total Savings	First Costs	Simple Payback (years)	SIR
	Demand:	\$0.000	/kW								
	Gas:	\$1.08	/therm								
Utility Taxes:	0.00%										
ECM-1	Vacancy Sensors			28,054	-	\$3,563	\$0	\$3,563	\$5,850	1.6	9.1
ECM-2	Conversion to LED Lighting			77,521	-	\$9,845	\$0	\$9,845	\$92,918	9.4	1.6
ECM-3	Building Automation System			59,662	3,966	\$7,577	\$4,273	\$11,850	\$143,119	12.1	1.2

7.5 SUMMARY OF BENCHMARKING RESULTS

- A. Typically, for energy audits, it is helpful to compare the building in question to other buildings of similar size and occupancy to gauge the efficiency of the building. Farris Engineering performed an analysis using ENERGY STAR's Target Finder program and determined that this building is in the 69th percentile of buildings of similar sizes and occupancy. Below is the output from the Target Finder website.



Welcome **DANNY4442** | Account Settings | Notifications | ENERGY STAR | Contacts | Help | Sign Out

MyPortfolio
Sharing
Reporting
Recognition

You have successfully edited the use details for Building Use.

Hemingford

911 Niobrara Ave., Hemingford, NE 69348 | [Map It](#)

Portfolio Manager Property ID: 35309272

Year Built: 1920

[Edit](#)

Not currently eligible for ENERGY STAR Certification

[Change Metric](#)

ENERGY STAR Score (1-100)

Current Score: 69

Baseline Score: 69

Summary | **Details** | Energy | Water | Waste & Materials | Goals | Design

Basic Information

Construction Status:
Existing property that is one single building

Property GFA - Self-Reported:
114,495 Sq. Ft.

Occupancy:
100% [Edit](#)

Property Uses and Use Details

[View as Diagram](#) | Add Another Type of Use [Add](#)

Name	Property Use Type	Gross Floor Area	Action
Building Use	K-12 School	114,495 ft ²	I want to... <input type="text"/>
Custom Use Details (Learn More)			I want to... <input type="text"/>

Property GFA (Buildings): **114,495** (used to calculate EUJ)

Property GFA (Parking): 0

To edit multiple uses for this property (or multiple properties), you can use the [Update Use Details spreadsheet template](#).

Unique Identifiers (IDs)

Portfolio Manager ID:
35309272

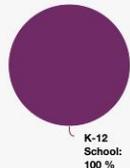
Standard IDs:
None

Custom IDs:
None

You can select from Portfolio Manager's **Standard IDs** to provide information to others in data requests. Or you can create up to three **Custom IDs** so that you can cross reference your property in other systems.

[Edit](#)

Property GFA by Use



K-12 School: 100%

Property Type

Property Type - Self-Selected:
K-12 School [Edit](#)

Property Type -Portfolio Manager-Calculated:
K-12 School

The **Portfolio Manager-Calculated** Property Type is used for your metrics (except for Mixed Use properties). [Learn more about property types.](#)

Additional Information

Federal Property:
Not Set

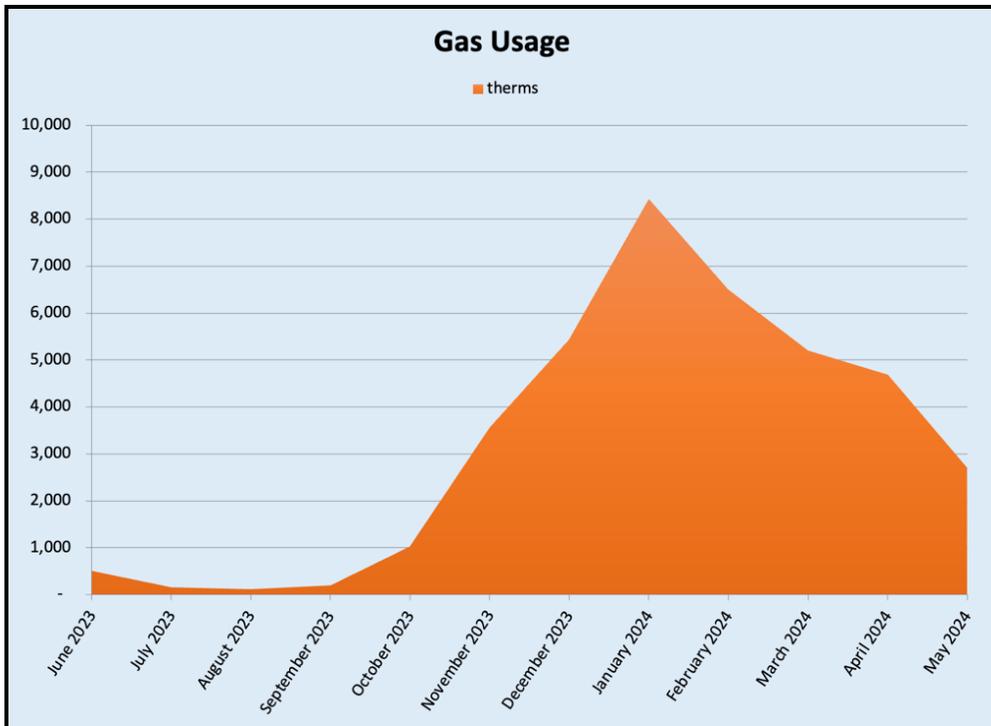
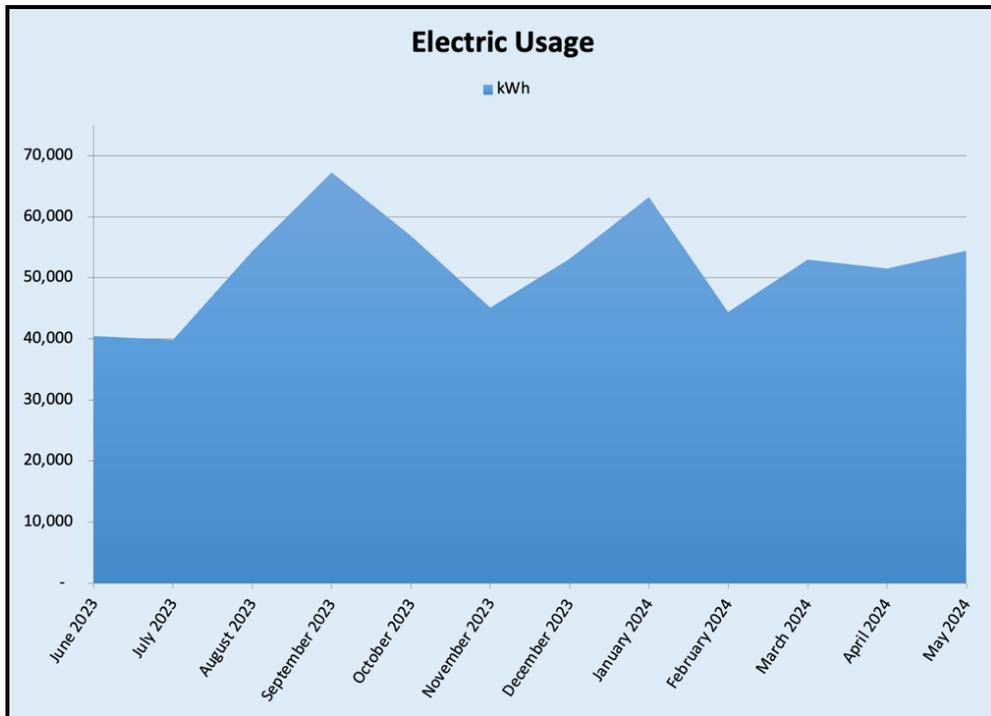
Service & Product Provider:
None ([Find a SPP](#)) [Edit](#)

Property Notes

Use the following area to keep notes on your property.

7.6 HISTORICAL ENERGY CONSUMPTION AND COSTS

A. See below for charts that show the electric and gas usage from June 2023 to May 2024.



7.7 ENERGY CONSERVATION MEASURES

A. ECM-1: Vacancy Sensors

- Most of the spaces in this facility currently use standard light switches. During energy audits, it is common to find many spaces that have lights on even though no one is in the room. These existing light switches could relatively easily be changed out with vacancy sensors. Similar to occupancy sensors, vacancy sensors require the person to actively turn the lights on when entering the room, and then automatically turn them off after a time-delay once the person leaves the room. This enables the occupant to more easily leave the lights off if the ambient lighting in the space is high enough. It is estimated that vacancy sensors can save around 30% of the building's lighting energy usage. The cost to replace the existing light switches with vacancy sensors is estimated to be around \$5,850 with an estimated annual energy savings of \$3,563.

ECM-1	Estimated Annual Savings				Payback Info		
	Energy Savings (kWh)	Demand Savings (kW)	Gas Savings (therms)	Annual Cost Savings	First Costs	Simple Payback (years)	SIR
Vacancy Sensors	28,054	-	-	\$3,563	\$5,850	1.6	9.1

* First costs for ECM-1 are estimated costs and include an estimate of material and labor costs.

B. ECM-2: Conversion to LED Lighting

- A portion of these buildings have already undergone LED lighting retrofits. The remaining lighting in these buildings is mostly made up of fluorescent fixtures. There could be significant energy savings if the remaining light fixtures were converted to LED. While there would be a significant first cost associated with this effort, it is estimated that there could be annual savings of approximately \$9,485.

ECM-2	Estimated Annual Savings				Payback Info		
	Energy Savings (kWh)	Demand Savings (kW)	Gas Savings (therms)	Annual Cost Savings	First Costs	Simple Payback (years)	SIR
Conversion to LED Lighting	77,521	37.2	-	\$9,845	\$92,918	9.4	1.6

* First costs for ECM-2 are estimated costs and include an estimate of material and labor costs.

C. ECM-3: Building Automation System

- These buildings currently do not have a building automation system (BAS). These systems are often provided on buildings of this nature in order to control the mechanical systems, allowing greater control of the systems, providing historical data, and helping to troubleshoot any issues that may arise. Many times, inefficiencies in the building are hard to find, unless the information provided by a BAS is available. While these systems are expensive, they can offer quite a bit of energy savings. The payback on a BAS is over 10 years, but other factors such as the complexity of the mechanical systems and the benefit of maintenance troubleshooting should also be considered when making a decision on whether to utilize a BAS at a building. While the first cost of a BAS is estimated to be around \$143,119, it would be beneficial to get an actual quote from a temperature controls vendor. The estimated annual energy savings would be \$11,850.

ECM-3	Estimated Annual Savings				Payback Info		
	Energy Savings (kWh)	Demand Savings (kW)	Gas Savings (therms)	Annual Cost Savings	First Costs	Simple Payback (years)	SIR
Building Automation System	59,662	-	3,966	\$11,850	\$143,119	12.1	1.2

* First costs for ECM-3 are estimated costs and include an estimate of material and labor costs.

7.8 MISCELLANEOUS AND MINOR ITEMS

- A. The following items are energy conservation measures that would not have a quick enough payback to likely warrant consideration for energy-saving purposes alone but should be taken into consideration when master planning or replacing equipment at the end of their useful lifespan.
1. MS Modular
 - a. This building is served by a split system. It appears that the condensing unit is a low-efficiency unit, likely around 13 SEER and the furnace is around 80% efficient. When they reach the end of their useful life, it is recommended that they be replaced with a high efficiency condensing unit with a 20+ SEER rating and a condensing furnace with 95%+ efficiency.
 2. High School
 - a. A portion of this building is served by a gas-fired domestic water heater. This water heater has an efficiency of around 80%. When it reaches the end of its useful life, it is recommended that it be replaced with a high efficiency condensing water heater with 95%+ efficiency.
 - b. The 1990 addition is served by two split systems. The condensing units have efficiencies around 14 SEER and the furnaces are around 80% efficient. When they reach the end of their useful life, it is recommended that they be replaced with high efficiency condensing units with a 20+ SEER rating and condensing furnaces with 95%+ efficiency.
 - c. It appears that there are two ducted openings through the roof in the kiln room. While there is a damper on one of the ducts, it appears to be open even though the kiln was not in use. It is recommended that these ducts be provided with dampers that will close when the kiln is not in use, to prevent hot/cold air from entering the building.
 - d. The high school building has approximately nine rooftop units that serve a majority of the building. The units have efficiencies around 11 EER. When they reach the end of their useful lives, it is recommended that they be replaced with high efficiency rooftop units with a 15+ EER rating.
 3. Admin
 - a. This building is served by two split systems. The condensing units have efficiencies around 15 SEER and the furnaces are around 80% efficient. When they reach the end of their useful life, it is recommended that they be replaced with high efficiency condensing units with a 20+ SEER rating and condensing furnaces with 95%+ efficiency.



- b. A portion of this building is served by a gas-fired domestic water heater. This water heater has an efficiency of around 80%. When it reaches the end of its useful life, it is recommended that it be replaced with a high efficiency condensing water heater with 95%+ efficiency.
- c. The building's hot water system does not utilize a recirculation system. While adding this system at this point would likely have a long payback, consideration should be given to providing these recirculation systems on future projects to minimize the amount of water that is wasted while waiting for hot water.

4. Elementary

- a. A portion of this building is served by a gas-fired domestic hot water heater. This water heater has an efficiency of around 80%. When it reaches the end of its useful life, it is recommended that it be replaced with a high efficiency condensing water heater with 95%+ efficiency.
- b. The building's hot water system does not utilize a recirculation system. While adding this system at this point would likely have a long payback, consideration should be given to providing these recirculation systems on future projects to minimize the amount of water that is wasted while waiting for hot water.
- c. This building utilizes an air-cooled chiller for cooling. While the chiller is relatively efficient, the chiller relies on a constant speed pump to distribute the water throughout the building. It is recommended that, as the equipment is replaced, consideration be given to converting this system from a constant flow system to a variable flow system.
- d. This building utilizes hot water boilers for heating. The boilers are 77.4% efficient and the hot water pumps are constant speed. It is recommended that, as equipment is replaced, the boilers be replaced with condensing boilers with 95%+ efficiency and consideration be given to converting this system from a constant flow system to a variable flow system.

5. Gym

- a. The gym utilizes gas-fired unit heaters. The heaters appear to be around 80% efficient. When they reach the end of their useful life, it is recommended that they be replaced with high efficiency condensing unit heaters with 95%+ efficiency.
- b. This building is served by two gas-fired domestic water heaters. These water heaters have an efficiency of around 80%. When they reach the end of their useful lives, it is recommended that they be replaced with high efficiency condensing water heaters with 95%+ efficiency. While this system does have a recirculation pump, it does not appear as though it is being controlled via a time clock or aquastat. It is recommended that one (or both) of these control options be utilized.
- c. The lobby utilizes a gas-fired furnace. The furnace appears to be around 80% efficient. When it reaches the end of its useful life, it is recommended

that it be replaced with a high efficiency condensing furnace with 95%+ efficiency.

6. Ag Shop

- a. This building utilizes a gas-fired furnace. The furnace appears to be around 80% efficient. When it reaches the end of its useful life, it is recommended that it be replaced with a high efficiency condensing furnace with 95%+ efficiency.
- b. A portion of this building is served by a gas-fired domestic water heater. This water heater has an efficiency of around 80%. When it reaches the end of its useful life, it is recommended that it be replaced with a high efficiency condensing water heater with 95%+ efficiency. There is quite a bit of hot water piping that is not insulated. It is recommended that all hot water piping is insulated.
- c. The building's hot water system does not utilize a recirculation system. While adding this system at this point would likely have a long payback, consideration should be given to providing these recirculation systems on future projects to minimize the amount of water that is wasted while waiting for hot water.

7. Maintenance Shop

- a. This building utilizes a gas-fired unit heater. The heater appears to be around 80% efficient. When it reaches the end of its useful life, it is recommended that it be replaced with a high efficiency condensing unit heater with 95%+ efficiency.

8. Greenhouse

- a. This building utilizes a gas-fired unit heater. The heater appears to be around 80% efficient. When it reaches the end of its useful life, it is recommended that it be replaced with a high efficiency condensing unit heater with 95%+ efficiency.

9. South Campus

- a. This building is served by a split system. It appears that the condensing unit is a low-efficiency 13 SEER unit, and the furnace is 80% efficient. When they reach the end of their useful life, it is recommended that they be replaced with a high efficiency condensing unit with a 20+ SEER rating and a condensing furnace with 95%+ efficiency.

PART 8 - RECOMMENDATIONS

8.1 GENERAL

- A. The priority of the recommendation is categorized as high, medium, or low.
1. **High:** A priority rating of high is justification for immediate remedy and corrective action. Service life of these systems or components has been reached or exceeded and are broken, unsafe, obsolete, or do not meet current code. Implementing recommendations will increase the life safety aspects of the buildings, will reduce further deterioration of the building components, will enhance the energy efficiency of the facility, and will ensure that the building operates as designed.
 2. **Medium:** A priority rating of medium suggests the system or components has a remaining life of 5 years and may have minor deficiencies that can be funded as part of a capital renewal program. This category includes conditions requiring appropriate attention to preclude predictable deterioration or potential downtime and the associated damage or higher costs if deferred further.
 3. **Low:** A priority rating of low represents systems or components with remaining life cycle exceeding 5 years but have minor deficiencies. Implementing recommendations in this category will either improve use of the building and/or reduce long-term maintenance.
- B. Any opinions of probable construction cost are made based on information available and previous project experience. However, Farris Engineering has no control over the cost of labor, materials, equipment, or services furnished by others, over the contractor(s)' methods of determining prices, or over competitive bidding or market conditions. Farris Engineering does not guarantee that proposals, bids, or actual project or construction costs will not vary from opinions of probable cost prepared by Farris Engineering. All opinions of cost are intended to be considered only as a rough order of magnitude (ROM) for planning purposes.

8.2 MECHANICAL

- A. **Medium:**
1. Replace boilers in 1926 Elementary building with high-efficiency, condensing style boilers.
 - a. Opinion of Probable Construction Cost: \$200,000
 2. Replace hot/chilled water pumps with new inline pumps and provide variable frequency drives and associated temperature control system upgrades.
 - a. Opinion of Probable Construction Cost: \$40,000
 3. Replace chilled water pump with (2) new inline pumps in parallel configuration. Provide variable frequency drives and associated temperature control system upgrades.
 - a. Opinion of Probable Construction Cost: \$45,000
 4. Add cooling to Main Gymnasium with new packaged rooftop units to include DX cooling, natural gas heat, and adequate ventilation for the rated occupancy of the spectator and play areas.

- a. Opinion of Probable Construction Cost: \$615,000
- 5. Incorporate replacement plan for all packaged rooftop units that are near or have exceeded their expected 15-year service life. Areas served by this equipment include:
 - a. 1966 High School
 - b. 1980 Administration
 - c. 1999 Music
 - d. 1999 Distance Learning
 - e. 2014 Commons
 - f. Opinion of Probable Construction Cost: \$450,000
- B. Low:
 - 1. Convert 2-pipe hot/chilled water changeover system to a 4-pipe system capable of simultaneous heating and cooling operation.
 - a. Opinion of Probable Construction Cost: \$415,000
 - 2. Perform radon testing and mitigation as required.
 - a. Opinion of Probable Construction Cost: \$5,000
 - 3. Provide campus-wide building automation system.
 - a. Opinion of Probable Construction Cost: \$175,000

8.3 ELECTRICAL

- A. High:
 - 1. Provide emergency egress lighting and exit signage in buildings that do not currently have emergency egress lighting to meet code required lighting levels and exit marking. The following buildings that would need this additional lighting include:
 - a. Maintenance Shop
 - b. Greenhouse
 - c. Football/Crow's Nest
 - d. Concessions Building
 - e. Multipurpose Room
 - f. Opinion of Probable Construction Cost: \$30,000
 - 2. Provide proper NEC clearances for each electrical panel that is not currently in compliance with the NEC code.

a. Opinion of Probable Construction Cost: \$8000 (each panel)

B. **Medium:**

1. Replace existing fluorescent and metal halide lighting with new LED lighting for the interior and exterior lighting throughout all the buildings and site. As lighting is replaced in buildings that have existing emergency egress lighting, coverage of emergency egress lighting shall be updated as required to meet code minimum requirements.

a. Opinion of Probable Construction Cost: \$1,120,000

2. Provide and/or upgrade lighting controls to provide automatic light reduction to meet current energy code requirements for both exterior and interior lighting.

a. Opinion of Probable Construction Cost: \$280,000

3. Provide a new fire alarm system that provides recent code required voice evacuation systems in buildings that meet the classification of a building occupancy of education. Provide any corresponding upgrades to any fire alarm systems where fire sprinkler modifications or additions are added.

a. Opinion of Probable Construction Cost: \$420,000

C. **Low:**

1. Replace existing electrical equipment and panels that have reached end of life as budget and time permits. Panels can be replaced one at a time in lieu of replacing all at one time, if necessary. If any future remodels of the buildings were to occur, replacement of panels may be required due to any additional loads.

a. Opinion of Probable Construction Cost: \$10,000 (each panel)

2. Provide dedicated telecommunication spaces in buildings that have telecommunication equipment in areas that are not dedicated specifically for equipment.

a. Opinion of Probable Construction Cost: \$100,000 (each)

8.4 PLUMBING

A. **High:**

1. Provide backflow preventers at all domestic water service locations that are not currently protected.

a. Opinion of Probable Construction Cost: \$3,500 (each)

2. Engage a qualified plumbing contractor to scope, locate, and document the condition of all sanitary sewer piping mains below the building and on the site.

a. Opinion of Probable Construction Cost: \$5,000

B. **Medium:**

1. Incorporate replacement plan for all domestic water heaters that are near or have

exceeded their expected 10-year service life. Areas served by this equipment include:

- a. 1980 Admin
 - b. 1990 High School
 - c. 2001 Middle School Modular
 - d. Ag Shop
 - e. Multipurpose Room
 - f. Opinion of Probable Construction Cost: \$35,000
2. Convert all plumbing fixtures to ADA where required.
 - a. Opinion of Probable Construction Cost: \$25,000
- C. Low:
1. Replace all damaged or missing pipe insulation.
 - a. Opinion of Probable Construction Cost: \$7,500
 2. For fixtures that are in acceptable condition but are over 20 years old, replace plumbing accessories such as isolation valves, flexible piping, flush valves, trap insulation, etc.
 - a. Opinion of Probable Construction Cost: \$25,000

8.5 FIRE PROTECTION

- A. **High:**
1. Provide fire suppression for all areas of the Main School Building that are not currently protected.
 - a. Opinion of Probable Construction Cost: \$400,000
 2. Replace door lock on mechanical room door in Gymnasium where fire service is located.
 - a. Opinion of Probable Construction Cost: \$500



HEMINGFORD
PUBLIC SCHOOLS

HEMINGFORD
HIGH SCHOOL

Hemingford Public Schools
Facilities Assessment

2024

FINAL REPORT JULY 2024

Heminford Public Schools Facilities



➤ Facilities Reviewed

Heminford High School
(7th – 12th)

Heminford Elementary
School (K – 4th)

Red Zone and Central
Administration Building

Gymnasium Building

South Campus Building

Shop Building

Support Buildings and
Grounds (Modulars,
Maintenance, Press Box,
Concessions)

➤ Completion Date:

June 2024

➤ Report Completed By:

JEO Consulting Group, Inc.
120 E 16th Street
Scottsbluff, NE 69361

p. 308.632.3123
jeo.com



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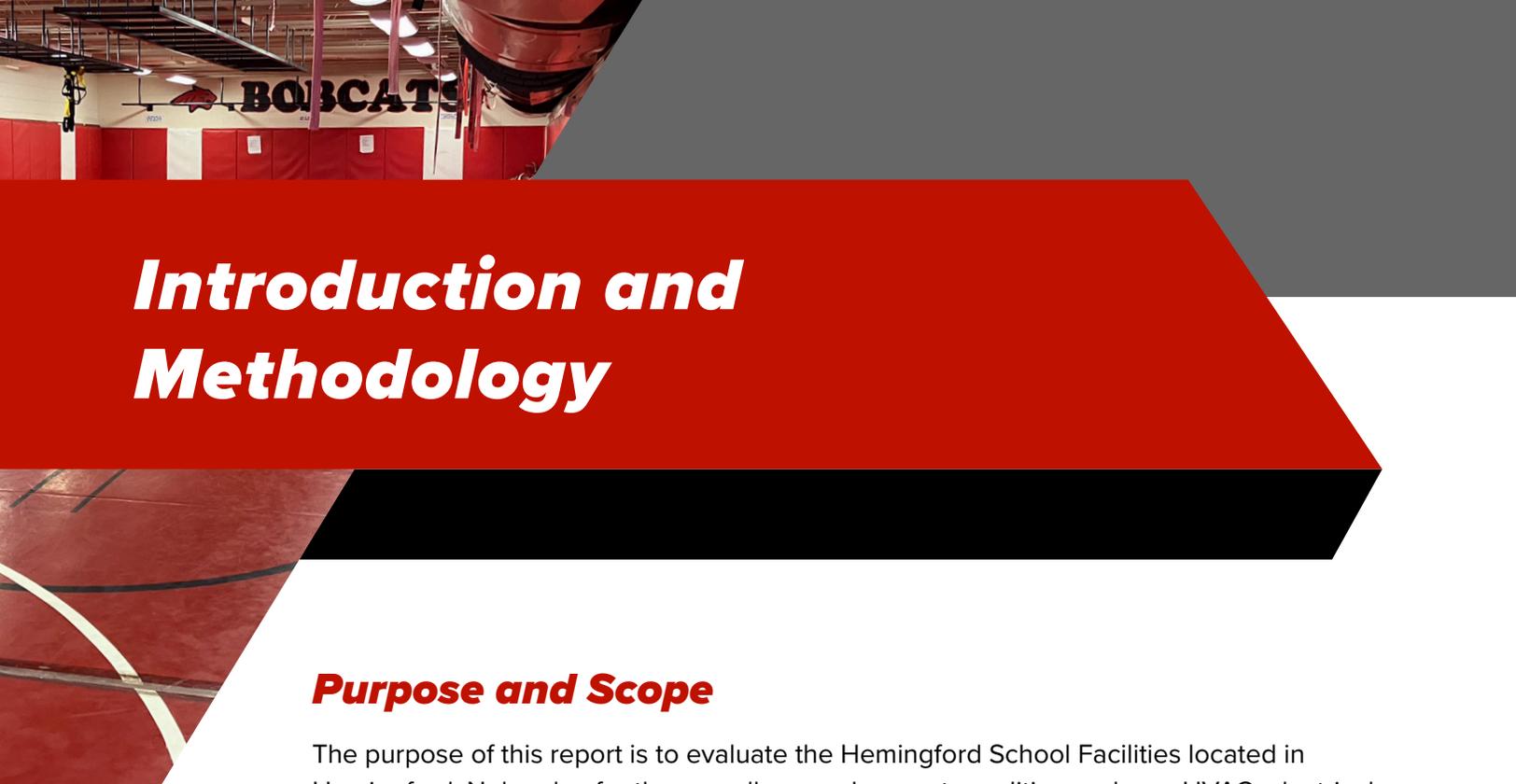
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Appendix 1 - Feedback from staff, students and public meetings

Appendix 2 - Building floor plans



Introduction and Methodology

Purpose and Scope

The purpose of this report is to evaluate the Hemingford School Facilities located in Hemingford, Nebraska, for the overall general current condition and use; HVAC, electrical, and plumbing system; structural review of any concerning areas; and compliance with the Americans with Disabilities Act (ADA) Standards issued by the Department of Justice.

Each building is evaluated based on architectural, structural, mechanical systems, electrical, and civil/site reviews. Each section includes a list of recommended improvements and is given a level of importance of low, medium, or high. We have also made general notes on the appeal and appearance of the spaces that may not affect safety or code compliance but are considered in overall long-term planning for the facilities.

Methodology

This report focuses on performing a facilities condition assessment for the Hemingford Public School buildings and estimating the costs required to address those needs. JEO Consulting Group, Inc. (JEO) compiled a team to conduct assessments structured to review the following major components:

- Architectural
- Structural
- ADA compliance
- Fire and life safety
- Mechanical, electrical, and plumbing (MEP) (covered in a separate report)

The criteria for assessing the systems is based on the physical condition and remaining service life.

All assessments are based on visual observations of the buildings and their equipment and information provided by the facility maintenance staff. School District personnel were knowledgeable and very helpful in providing information for the study. Team personnel used checklists for reference and professional experience to observe and evaluate conditions. Photographs of noted deficiencies were also taken, and representative samples were included for each school.

Cost Estimates

When we are able to provide a relatively accurate scope required to fix noted problems, estimated cost summaries are provided. In some cases, there are various alternatives to improvements or relocation of facilities, so costs are not provided at this time. Upon further discussion or prioritization of improvement options, we can further evaluate cost alternatives at no additional fee to the district. Costs are all based on RS Means reference data when available.

An assessment report does not investigate these issues in enough detail or prepare a design-level analysis of how to fix each problem in specific detail.

Cost information prepared for the report is budget numbers based on unit costs over certain areas of a given facility. For example, roof costs are developed on a square foot (sf) basis, and typically, roof costs are estimated at \$20-\$22 per square foot (sf) for standard flat roof replacement, and the typical warranty life of a roof is used as a projection of the time and need for replacement. In some cases, noted failure is visible and replacement is recommended sooner.

Budget numbers are consistent for each school and facility examined. Unit costs used at each school are the same unless there are specific reasons why costs should be adjusted. When actual bidding and construction of improvements take place, costs can and often do vary. Budgets are intended to provide the best estimate to properly fix the problems or deficiencies noted in the study for long-term viable use, safety, and code compliance.

This report does not address any issues with asbestos. Asbestos testing was not included in this investigation and report. There may be some areas where we noticed possible asbestos and noted such in the report. In these cases, we have recommended further investigation to determine the extent and condition of possible asbestos.

Applicable Codes

The following codes are used in our facility review. Keep in mind that the entire facility does not have to meet all current codes and much of the building is considered “grandfathered.” However, we review the building as if it were constructed to current standards, point out deficiencies, and then prioritize those deficiencies based on their potential impact on safety, operational cost, and function.

- International Building Code, 2018 Edition
- International Energy Conservation Code, current adopted edition (2009)/ASHRAE 90.1-2007
- NFPA 101, Life Safety Code, National Fire Protection Association, as currently adopted by the Nebraska State Fire Marshal, 2012 Edition
- Applicable NFPA pamphlets currently listed by the Nebraska State Fire Marshal ANSI
- Standard A17.1 for Elevators and State of Nebraska Elevator Inspector requirements
- International Plumbing Code, 2012 Edition
- International Mechanical Code, 2012 Edition
- International Fuel Gas Code, 2012 Edition
- International Existing Building Code, 2012 Edition
- National Electrical Code (NFPA 70), 2014 Edition

Architectural Review Summary

The assessment identifies several code-related deficiencies. Given the age of the buildings, this “code deficiency” is not particularly surprising. With each new issuance of building codes (approximately every three years), new design requirements are included, and others are eliminated. Identified code deficiencies can have a variety of characteristics. Some represent a significant hazardous condition that should be eliminated as soon as it is practical. Others identify conditions that should be addressed in the course of a long-term capital improvement process. Still others represent changing societal norms and can often represent legal exposure for building owners (e.g. handicap accessibility).

In reviewing these buildings, the school maintenance staff has done an excellent job of maintaining the original buildings and their equipment, but the age of these buildings could now become a major cost burden to the school district. These buildings have deficiencies in their building envelope walls, windows, doors, roofs, insulation, etc., as well as mechanical and electrical equipment that is no longer performing to its original standards when installed, let alone today’s standards.

Architectural review encompasses the overall function of the building, aesthetics, structural review, and general code compliance. We also review the condition of roofs, fire/safety code issues, the building envelope condition, and an overview of security measures currently in place, such as controlled access, camera systems, consolidated entry points, and other high-level observations. This report is not intended to provide an in-depth review of security measures or recommendations. Security measures are only mentioned as they relate to other long-term decisions about the building and any significant problems the current building layout may present. Security measures are highly subjective to owner preference and opinion. Security measures are not a requirement by code but have become common practice for educational facilities for good reason. Measures will vary significantly from district to district and will be much different in smaller rural communities than in larger metro areas, for example. Suggestions or observations noted here in this report are intended to provide some comparisons to typical practices and/or note possible areas of concern. However, JEO does not provide in-depth security recommendations or evaluations. For a more detailed security report, we would suggest working with law enforcement agencies or other specific security consultants.

Space needs for students and staff or an in-depth programming review are not part of this evaluation. However, for comparison we do provide a general overview of the total square footage and number of students to that of typical standards. Part of the consideration for improvements to these buildings should include the possible need for additional space and how that may factor into long-term planning.

For the review of roof systems, a report on portions of the high school and gym roofs was done in 2022. This report covers these areas in detail and is referenced in our report. A further detailed review of roof sections was not completed at this time, and we noted the conditions and ages of roofs where there was available information.

ADA Review Summary

The Americans with Disabilities Act (ADA) is a civil rights law that prohibits discrimination against individuals with disabilities. The law ensures that people with disabilities have the same rights as everyone else. ADA standards are used to ensure access to the built environment for people with disabilities.

ADA review is part of the internal architectural review in each section and part of the civil/site review of the exterior of each building. All buildings evaluated in this study were built before the 1990 ADA. Access to the buildings has some problems with ramps, parking, and sidewalks that do not meet ADA requirements. In addition, several elements within the buildings are noted in the following summaries and documentation that do not meet ADA standards. Please keep in mind that older buildings do not have to meet current building codes unless there are issues that affect the welfare of the inhabitants and the public in general. Any type of remodeling of these existing structures shall require those areas

affected by construction will then have to meet the current building codes. ADA is not a building code; it is a government regulation that has been written into law requiring that all buildings be in compliance, regardless of when they were built. There are only a few exceptions to this, and these exceptions are mainly concerned with buildings that have been registered as being “historically” significant.

Please note that ADA references come from the most current publication, the 2010 ADA Standards for Accessible Design. This publication may be viewed or downloaded from the ADA website (www.ADA.gov). It is encouraged that school administration, board members, and maintenance staff have copies of this reference available.

In addition to specific elements of a school, such as a restroom, we also review accessible routes through the building and around the school grounds. An accessible route is a continuous, unobstructed path connecting all accessible elements and spaces in a building, facility, or site. An accessible route may include sidewalks, corridors, floors, ramps, elevators, lifts, or clear floor spaces at a fixture. An easy way to think about an accessible route is to consider it as an unobstructed pathway for a wheelchair user to navigate through the exterior property of a building and through the interior of the building to reach every area of the property and building.

Accessible routes are required in the following locations:

- **Site Arrival Points:** At least one accessible route is required within the site, from accessible parking spaces and passenger loading zones, public streets and sidewalks, and public transportation stops to the accessible building entrance they serve.
- **Within a Site:** At least one accessible route shall connect accessible buildings, facilities, elements, and spaces on the same site.
- **Multi-Story Buildings:** At least one accessible route shall connect each story and mezzanine in a multi-story building.
- **Spaces and Elements:** At least one accessible route shall connect accessible building or facility entrances with all accessible spaces and elements within the building that are otherwise connected by a circulation path.
- **Play Areas:** At least one accessible route shall be provided within a play area to connect ground-level play components.

Civil/Site Summary

The civil and site assessment looks at the overall grounds of the campus and provides a summary review of the current condition of facilities as well as a review of the function of the site as it relates to site utilities, access, drainage, and overall use. The civil portion of the project also reviews ADA access and parking on the site, including parking stalls, sidewalk ramps, and sidewalk access to the building.

Mechanical, Plumbing, and Electrical (MEP) and Fire Suppression Evaluation

The MEP and fire suppression system evaluations and recommendations are covered in a separate report conducted simultaneously and in conjunction with this report. The report was completed by Farris Engineering and is intended to complement and accompany this report.

Chapter One:

Hemingford High School (7th – 12th)



Constructed	Size	Land	Grades	Students
1968, 1991, 1999	25,500-sf	6.5 acres	7 th – 12 th	165

Architectural Assessment

Hemingford High School was originally constructed in 1968 and, at that time, consisted of just the central portion of the building. This included the main classrooms in the hallway running east to west. Since then, there have been a number of additions, including the classroom wing to the south, the music room, the distance learning room (now used for business class), and the Red Zone addition recently constructed between the buildings in 2016. The school currently serves grades 7th – 12th, with some classes for younger students (art and music) located in the building.

The building is all on one level and generally well laid out. The classrooms all are accessed in the main corridors with exits to the south and west and an exit out of one of the science classrooms on the north.

The total sf of the building is around 25,500-sf. The building currently serves grades 7th – 12th with a population of approximately 165 students and 26 staff. This appears to be an adequate size building for this number of students. By comparison, some middle schools have a range of 75-100-sf per student. Hemingford Jr. High is currently about 300-sf per student, including calculating the total area of the gym building (15,400-sf) and Red Zone (4,800-sf). These areas are shared with the elementary students as well. The average size nationally is around 145-sf per student (by comparison Bluffs Middle School is approximately 183-sf per student and Gering is around 235-sf per student).

The school building has been well maintained, and much of the finishes have been updated in the bathrooms and classrooms. The overall appearance is good and with some exceptions to a few areas, does not appear to be dated or neglected.

Most of the school and exterior have not been updated in recent years. Exterior utilities all appear to be original to the school. Various changes and paving/site improvements have been done in the front of the building, but most of the infrastructure is likely original, including drainage lines, water, and sewer.

Most of the interior doors and windows in the building appear to be original. Exterior doors and windows also appear to be all original. Additions to the music room, and distance learning room added newer entrance locations and door and would have replaced original exit doors. The west entry doors and north door from the science room appear to be original.

Most classrooms and bathrooms have had updated finishes including new carpet, tile, and partitions.

Accessibility

Generally, with the high school on one level, the classrooms and common student spaces are all accessible without steps or grade changes. Most doors appear to be at least 30” wide. There is one ADA stall in each of the restrooms as well.

The courtyard is generally ADA-accessible next to the building. However, much of the grounds and playground is not due to the significant grade changes on the site and the un-level paved areas.

Grade leading to the playground.



The west entry has several steps up to the door and no ramp access to the west parking lot. The south sidewalks are generally accessible, except areas along the highway and drop-off areas where the grades are too steep for ADA standards. The west entry has several steps up to the door and no ramp access to the west parking lot. The south sidewalks are generally accessible, with the exception of the areas along the highway and drop-off areas where the grades are too steep for ADA standards.

Fire and Safety

At approximately 25,500-sf, the building is well over the threshold for a fire suppression system based on current code requirements. Any addition or significant remodel to the building should trigger current compliance and the installation of a fire suppression system. Recommended fire suppression and fire alarm improvements are covered in the MEP review completed by Farris Engineering.

There are adequate exits throughout the building in terms of egress. However, this presents other challenges in terms of security and safety.

Building Envelope

The building has a brick exterior façade that is generally in fair condition. The brick face of the building typically will need to be tuck-pointed at some later date to protect the exterior and prevent water intrusion.

Structural

The high school building is a masonry block and steel one story structure. The building shows no visible signs of settlement or structural deterioration. There are no apparent structural concerns that need to be addressed.

Roof Systems

The high school's roof consists of two sections. The main classroom wing and the south wing addition are ballasted ethylene propylene diene terpolymer (EPDM) systems with an unknown age. The music room addition and distance learning addition have adhered to EPDM. The 2022 roofing report covers the ballasted roof in detail and recommends replacement at some point in the near future. The music room addition and the distance learning addition areas appear to be in fair condition, but we would expect their total life to be at or near the expected time for replacement based on age.

Security

The school has a camera system and controlled access at each of the doors (photo on the right). Visitors and students entering in the morning come through the main entry on the south side of the building (Red Zone). This is directly adjacent to the main office, but there is no secondary set of doors or vestibule. Access is controlled at the exterior. However, there is a project currently planned to address this and add a second set of doors, with access control being updated as well.

Camera/Controlled access near the Red Zone Building.



Programming/Use

The programming or use of the building is generally good. There are spaces that seem to be overcrowded, such as the SPED room. There are also some underutilized spaces in the library area and distance learning room. These spaces seem to have limited use for the amount of room available. Other noted problems were storage in some areas, such as art and music. Overall, the room sizes are favorable and well-suited for the use.

The current utilization of the space presents several concerns that require attention. In one of the science rooms, the absence of a sink impedes the ability to conduct laboratory activities, limiting the scope of practical experiments. Additionally, the art room suffers from inadequate storage facilities, which hampers the organization and accessibility of necessary materials. Furthermore, the lack of a dedicated classroom space for counseling services compromises the provision of confidential and focused support for students.

Other noted operational problems are a lack of storage for some rooms (smaller science and art rooms), lack of plumbing for one science room, and lack of storage in the music room.

Civil/Site Assessment

This section covers the overall site and campus, as the buildings are adjacent to each other and share the same access points and front drop-off areas.

- **Property Boundaries:** The site consists of approximately 6.5 acres bordered by Niobrara Street (Nebraska Highway 2) on the south, St. Bridgets Catholic Church on the east (Ogallala Avenue), and the Box Butte County Fairgrounds on the north and west.

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- **On-Site and Off-Site Parking:** There is very limited on-site parking, which consists of a small front drop-off area and bus/facility parking on the north side near the maintenance building. Off-site parking is across the highway at the south campus parking lot and to the west on the Box Butte County Fairground property. Overall, the site is a challenge, being landlocked on all sides and with limited space for Pre-K through 12th grade access. There is no drop-off other than along the highway.
 - **ADA Parking:** There is one ADA stall near the west entry along R Street and one parallel stall on Q Street near the administration entry. For events at the stadium, there is one ADA stall near the main entry gate on the south side of the stadium seating.
 - **Entry Doors:** Most entry doors have an at-grade level walkway without steps to the public parking areas. Each of the main entry points has a ramp to the street grade or a ramp near the ADA parking.
 - **Bus Access:** There is a bus drop-off/pick-up area on the south side of the school. However, this is not used for most buses, and this area has some steep areas of sidewalk grades and is overall non-ADA-compliant.
 - **Playground:** The playground is not fenced in, which has created issues with controlling kids on the site, animals wandering into the playground, and overall security concerns. Other concerns are the overall drainage of the north side of the site on the playground and areas between buildings. The site has drainage problems due to the playground sloping into the main building area and being shaded much of the time by the buildings. This creates issues with mud, ice, areas of broken concrete, bare ground, and overall maintenance issues.
 - **Steep Grades in Front:** Several areas in front of the school where there are ramps and sidewalks to the street have steep grades and exceed the ADA allowance.
 - **No Drop-off, Other Than on the Highway:** The front area along the highway is very limited for drop off or pick up. This area is also adjacent to the highway traffic.
 - **Drainage:** Drainage on the overall playground to the north is an ongoing concern. There are drain lines in place, but water is ponding and freezing in a number of areas on the north side of the administration building. The shade from the building and grade of the playground contribute to this problem.

An ADA stall near the Red Zone entrance.



- **North Side Bus Loading:** Currently, all buses load and unload on the north side of the playground, near the shop and maintenance buildings. The challenges with this setup include having only one entrance and exit, forcing buses to navigate in and out of the area close to the playground.



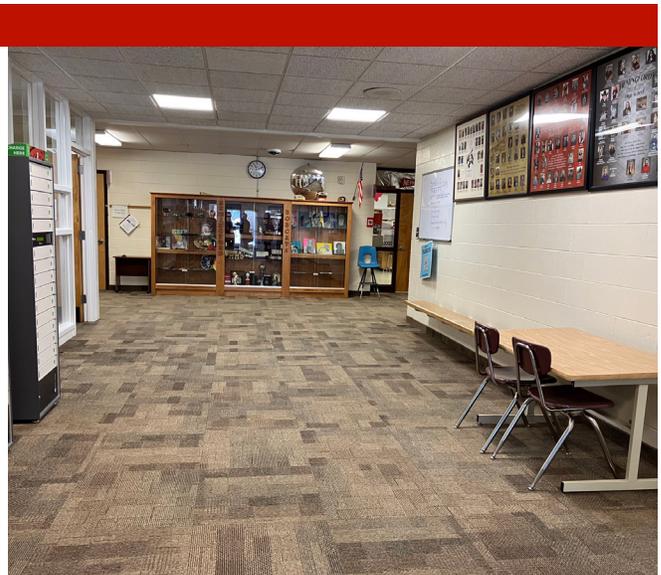
Hallway with student lockers.



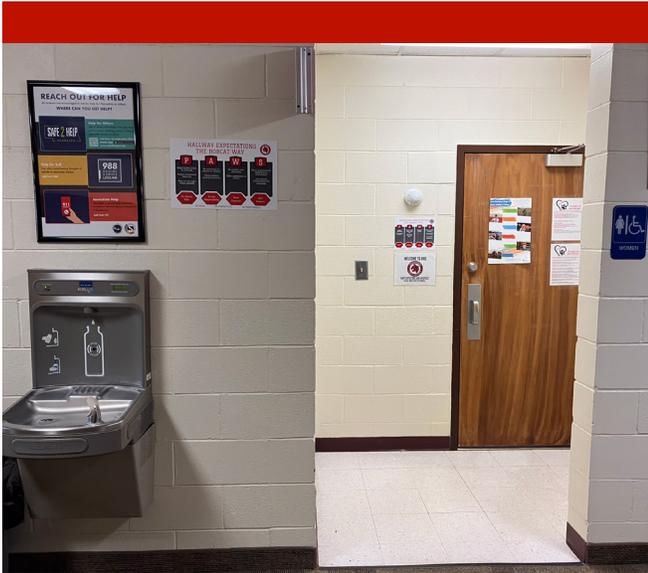
Central administration area.



Charging stations.



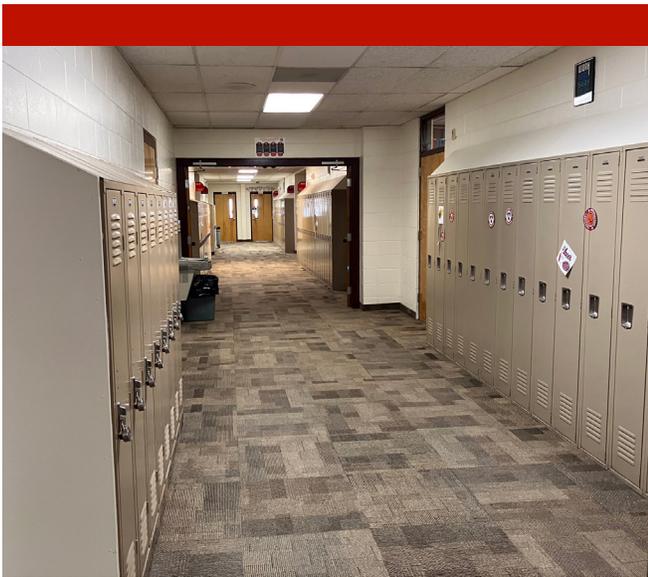
Charging stations along with student seating.



Water fountain in the hallway.



Lockers line the hallway.



Lockers along the south wing of the high school.



Controlled access at the west end exit.



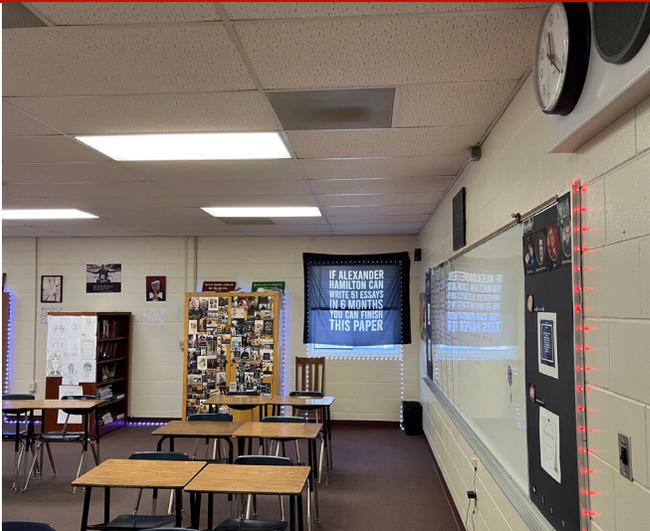
Social studies classroom.



Social studies classroom.



Social studies classroom.



Typical classroom.



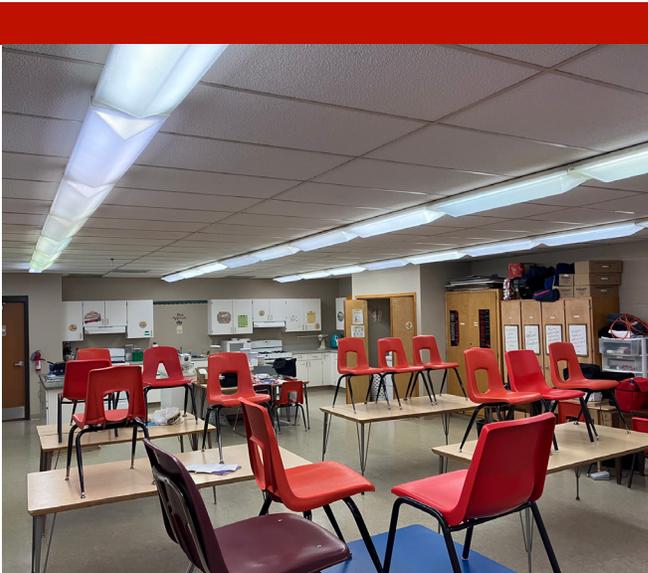
Typical classroom.



Science classroom/lab.



Science classroom/lab.



Family consumer science classroom.

Chapter Two: Hemingford Elementary School (K – 4th)



Constructed	Size	Land	Grades	Students
1926	17,000-sf	6.5 acres	K – 4 th	180

Architectural Assessment

Hemingford Elementary School was originally constructed in 1926 and was originally built as the high school at that time. It was connected to the administration building built in 1980, which was a stand-alone building prior to that. It was not connected to the high school until the “Red Zone” was added in 2016. The rooms within the school are smaller than what is typically seen in elementary schools. Rooms typically are around 650- to 800-sf per classroom. This building ranges in classroom sizes from 640-sf to as small as 490-sf.

The building currently serves grades K – 4th with a total population of approximately 180 students and about 15 staff. There is approximately 17,000-sf or about 94-sf per student. By comparison to other schools, this space is relatively small. In many elementary schools, the size of a school can range as little as 55-70 sf per student; however, the average is around 125-sf per student. By comparison, Scottsbluff Elementary Schools range from 95-sf to 125-sf per student, and Gering Elementary Schools range from 140-sf to 155-sf per student.

The interior windows and doors appear original to the school's construction. The exterior windows were installed in the early 1970s and need replacement. The restrooms have been modified to allow for at least one ADA stall. The entry doors on the south-central part of the school are newer as part of the music room addition, and the entry doors at the Red Zone entry are only eight years old.

The exterior brick/masonry is in good condition for its age. Overall, rooms are cluttered due to a lack of storage and a higher density of kids in small classrooms.

Accessibility

Currently, the lack of ADA-compliant access to the second floor poses significant challenges. Classes either remain on the ground floor or rotate based on the needs of students with disabilities. Furthermore, the existing stairs, characterized by an inadequate slope and the absence of tread, present a safety hazard. Navigating up and down these stairs to reach the main entrance further limits the exit capacity for individuals with mobility or visual impairments, heightening the risk during emergencies.

Fire and Safety

The building's second floor presents significant concerns regarding fire and safety protocols. Currently, there is only one main stairwell servicing this level, resulting in dead-end corridors on both sides and essentially providing only one viable exit route. This configuration is particularly troubling given that the second floor houses six classrooms, accommodating approximately 90-100 students. Although there is an escape stairway located at the northeast corner of the building, its steepness renders it unsafe, especially for younger children.

At 17,000-sf, the building is well over the threshold for a fire suppression system based on current code requirements. Any addition or significant remodel to the building should trigger current compliance and installing a fire suppression system. The fire suppression and fire alarm recommendations are included in the accompanying report for MEP systems by Farris Engineering.

Building Envelope

The elementary school building, which features a brick exterior façade and is generally in fair condition, shows no notable problem areas. However, it's important to note that masonry will typically require tuck-pointing periodically to ensure the exterior is protected and to prevent water intrusion. According to past correspondence, the building was last tuckpointed in 2002. The building currently has older windows, likely replaced in the 1970s, which are single-pane and need replacement (photo to the right). To enhance energy efficiency and security, it is recommended that the exterior windows be replaced. Additionally, an ongoing issue with wasps needs to be addressed.

Four single-pane windows in a classroom on the lower level.



Structural

The elementary building is a two-story structure masonry block and concrete structure built in 1926. there are no visible signs of settlement or structural damage. There are no major structural concerns with the building.

Roof Systems

The upper level of the building is an adhered EPDM roof system of unknown age. In a 2022 report, the roof showed signs of tenting (pulling away from the substructure) and pulling away at the attachment to the parapet wall. These conditions should be monitored and addressed when possible.

The gym roof appears to be a built-up, modified roof of unknown age. This section appears to be more worn than the lower section, but no deficiencies were noted in the last report.

Security

Examining the building reveals concerns regarding interior door safety and second-floor escape routes. The interior doors are deemed unsafe, warranting attention to ensure the security and well-being of occupants. Additionally, issues with the second-floor escape routes require assessment and potential improvement measures to enhance safety protocols within the building.

Programming/Use

The classrooms are notably small. The absence of adequate storage poses a significant issue, leading to cluttered classrooms and hindering organization. The second floor appears particularly crowded, increasing the space constraints throughout the building. Furthermore, there's a clear lack of overall space and designated breakout areas, limiting opportunities for collaborative learning and extracurricular activities. Additionally, the shortage of electrical outlets adds a layer of inconvenience, hampering the integration of technology into the educational environment.

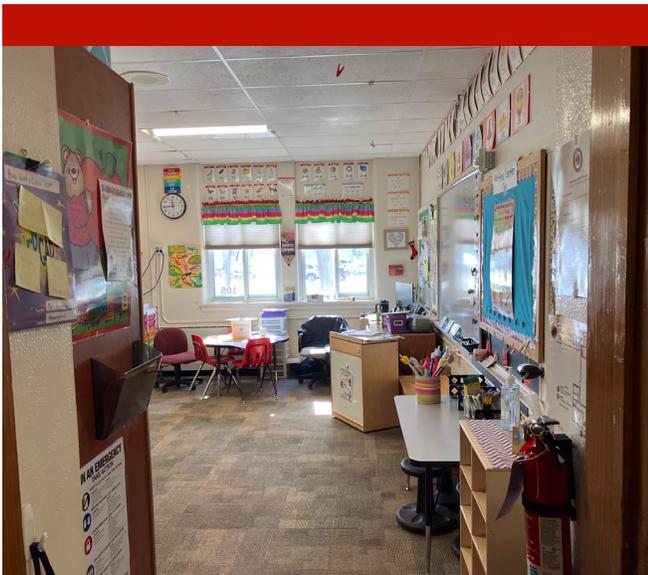
Other noted concerns with day-to-day operations are the lack of temperature control and variation in temperature, pest infestations (wasps) on a regular basis, and water intrusion in some areas.



Elementary gym.



Main original entry on the south side.



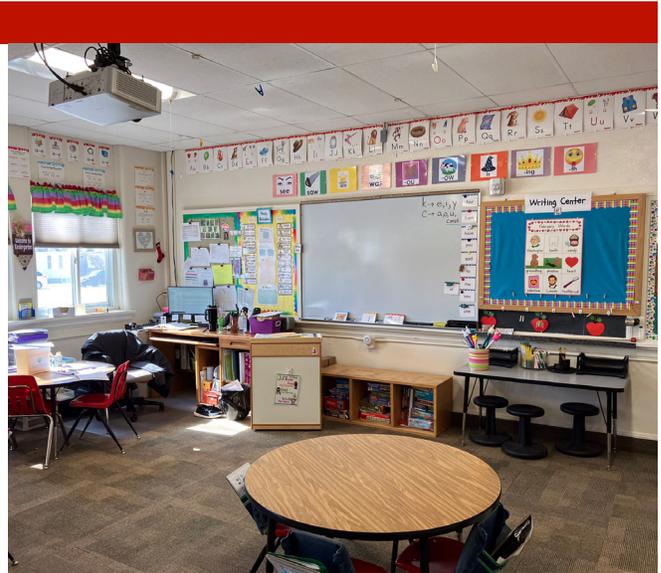
Typical classroom.



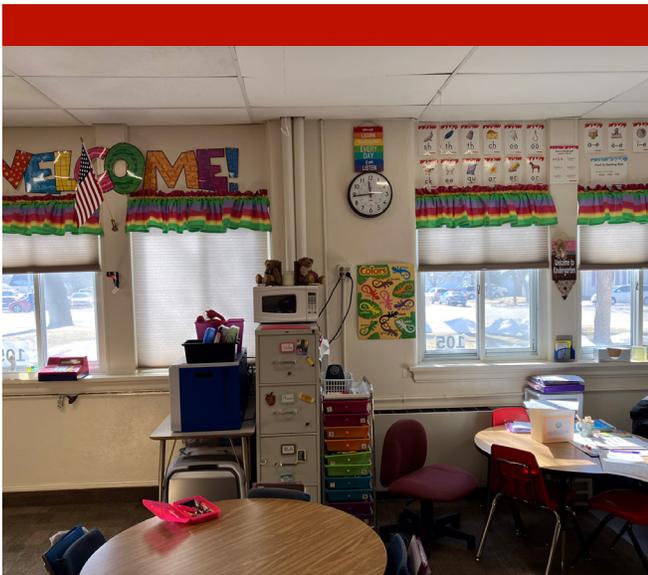
Typical classroom with cluttered areas of storage added with furniture.



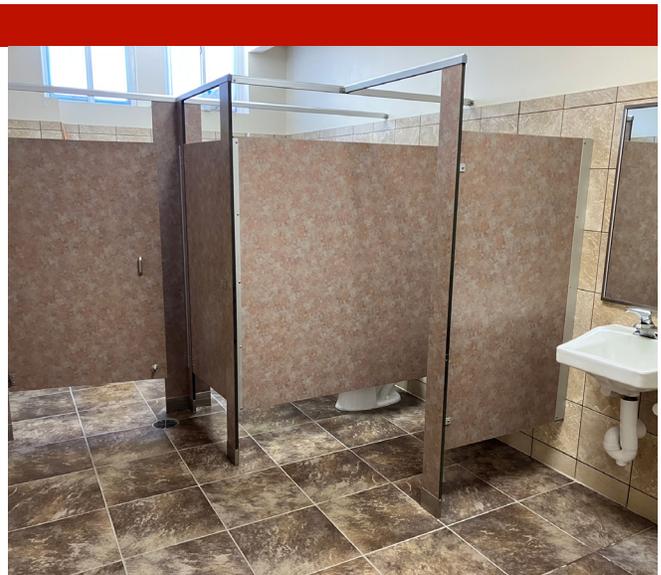
Classroom casework with added storage on top.



Typical classroom.



Classroom with storage cabinets.



Updated restrooms.



Elementary library.



Elementary library.



Chapter Three: Red Zone and Central Administration Building



Constructed	Size	Land	Grades	Students
1980, 2016	11,800-sf	6.5 acres	Preschool, K – 12 th	N/A

Architectural Assessment

The building consists of the original administration building, which was a stand-alone metal building unconnected to the other buildings until the recent Red Zone Addition. The Red Zone area is the newest area of construction. It includes the main administration offices for the reception and high school/elementary principals and the central commons/cafeteria, which connects the three buildings of the high school, elementary school, and administration building. This area seems to function well as a circulation space between buildings and for cafeteria space. It also creates a central entry point with controlled access and visibility to anyone entering the building.

The original administration building is in fair condition for its age (built in 1980). There are areas of rusted exterior metal panels, and generally, metal building construction is less energy efficient than other portions of the building.

The overall flow of the administration building could be more comfortable, with one narrow hallway in the center and a corridor on the east that connects to the elementary cafeteria. The superintendent's office, nurse, kitchen, preschool, SPED, and robotics classroom are all housed in the admin building portion.

Accessibility

The building is generally accessible, and restrooms have been updated. The narrow hallway in the center is not ideal for student traffic, but limited people typically access this hallway. The building is on two levels but the corridors have ramps to transition the grade. There are exterior exit doors on the east and west end, as well as at the south main entry.

Fire and Safety

This central portion of the building is covered by a fire suppression system, which is the only area currently equipped with one. The exit points are adequate for egress as well.

Building Envelope

The buildings metal envelope needs improvement, as it is less efficient. Original exterior windows may not meet modern insulation standards, leading to heat loss in winter and heat gain in summer. Upgrading materials and replacing old windows would enhance energy performance, reduce costs, and improve the learning environment.

Structural

The central administration area was constructed in 1980. The south entrance was added in 2014. There are no visual structural concerns except for the following items:

- The finished grade at the exterior of the building on the east and north sides (the sides with rooms 310, 311, and 312) slopes downward towards the building (see photos on pages 28 through 30). This creates a situation where the rainwater will accumulate against the building's foundation. Exterior grade should be adjusted so the slope is downward away from the building.

-
- The ceiling of Tech Room 309 (see photo on page 30) has excessive deflection in the north-south and east-west directions. The ceiling tile will need to be removed to review what is above it.
 - Based on discussions with Mr. Jim Miles, the exterior utility lines vary in depth from 12” to more than 12’. The exterior utility lines should be located so there is adequate frost protection (36’ at a minimum). Also, utility lines should be located a minimum of 24” beneath the bottom of the building foundations (this would apply to all areas). This is an item to be aware of.

Roof Systems

This area’s roof appears to have been newly installed in 2016 with the Red Zone addition. It is an adhered EPDM system that appears to be in good condition.

Security

The controlled central access point on the south side is a good practice, and the other doors also have cameras and controlled access. The main entry is currently being improved to include a vestibule for better control of anyone entering the building.

Programming/Use

The preschool room is very small at about 580-sf and, depending on the number of students, may not meet the minimum state requirement of 35-sf per student (16 students would be about max capacity). The administrative offices in the central administration building are adjacent to the busy circulation and cafeteria spaces, which is disruptive and can be a security concern. There is also an office in the same room as the central server equipment, which creates noise and temperature control issues.

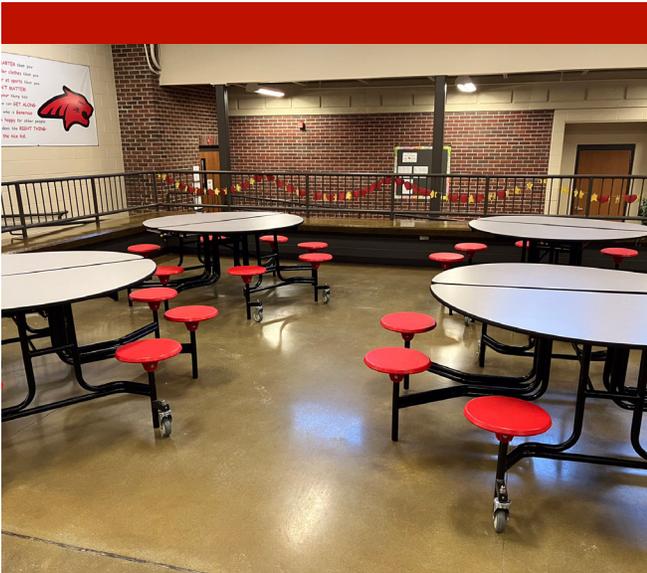
Additionally, the elementary school’s cafeteria is notably small and constrained. The dining tables are situated in a connecting corridor. Similarly, the kitchen area is overcrowded, given the high frequency and volume of its use.



Red Zone and high school cafeteria area.



Red Zone and high school cafeteria area.



Red Zone and high school cafeteria area.



Transition to high school wing.



Connecting hallway to elementary school.



Hallway on the north side by the preschool.



Sloped hallway in the center of the administration area.



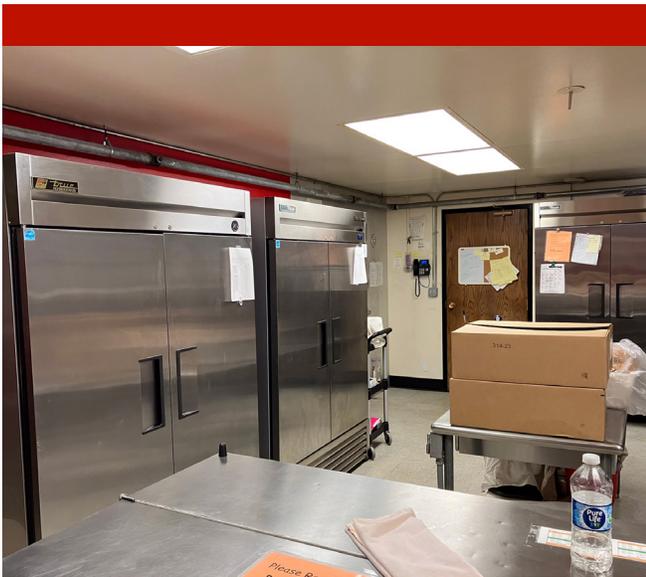
Robotics classroom on the north side.



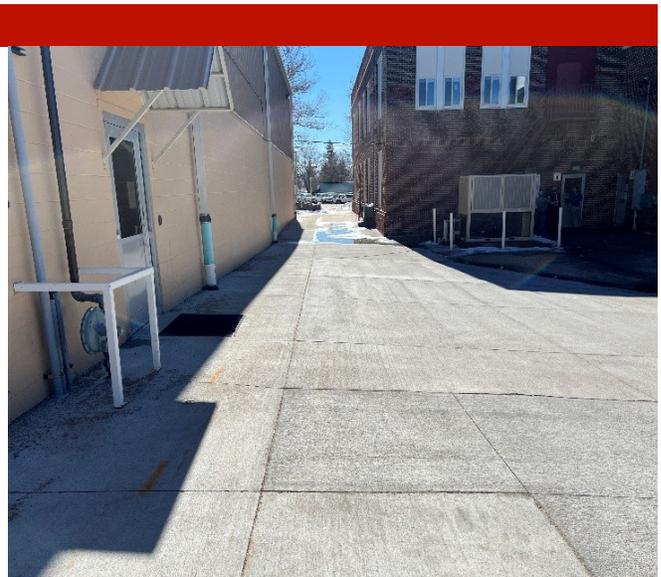
Northwest exit/entry.



Robotics classroom on the north side.



Kitchen area.



Ground level exterior grade looking south.



Ground level exterior grade looking west.



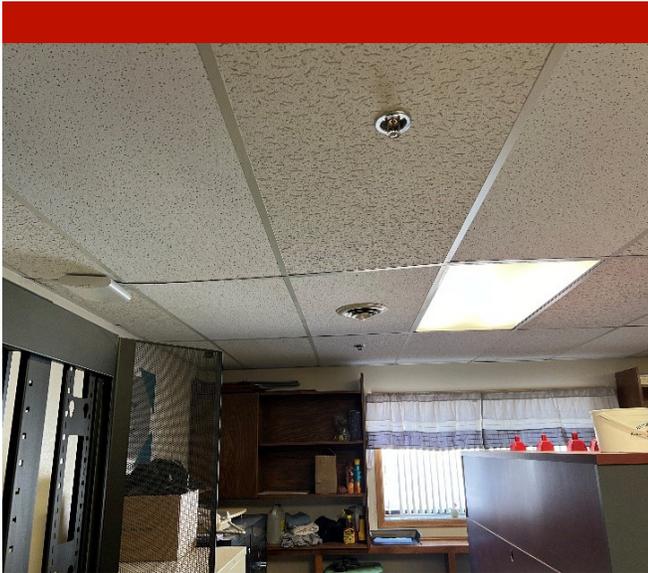
Ground-level exterior grade looking northeast.



Ground level exterior grade looking southeast.



Ground level exterior grade looking southwest.



Excessive ceiling deflection in Room 309.



Ground level exterior grade looking southeast.

Chapter Four: Gym Building



911 Niobrara Avenue
Hemingford, Nebraska 69348

Constructed	Size	Land	Grades	Students
1975, 1997, 2003	15,400-sf	6.5 acres	Preschool, K – 12 th	400

Architectural Assessment

Originally built in 1975 the gym building is approximately 15,400-sf and includes:

- The main competition gym and stage.
- An entryway for concessions and public restrooms.
- Back locker rooms and training rooms on the lower level.
- A wrestling room on the north side.
- A second level over the stage and locker rooms with a second set of locker rooms (high school students use the second level) and a small weight room.

The building is a metal building structure that has had several modifications or additions over the years, including the front entrance addition and the addition of the wrestling room area and locker rooms.

The school gym serves as a hub for physical activities, accommodating students from all grades, with a primary focus on grades 7th – 12th. Being the sole gym in the community, it experiences heavy usage throughout the year. However, there are notable limitations in terms of entryways and restroom facilities available to the public, which can pose challenges during busy events. The locker rooms are generally in good condition, providing adequate space for students to prepare and store their belongings. The gym includes an ADA ramps on the backside of the building, aiming to enhance accessibility to the upper levels. Yet, the placement is somewhat awkward, potentially complicating navigation for users. The gym itself is constructed from metal, featuring insulation and an exterior design suited for durability and weather resistance, ensuring its longevity despite frequent use.

Accessibility

An evaluation of the school gym reveal there's no direct access to the stage, with the second floor only being reachable from the outside, which could be inconvenient and difficult for anyone with limited mobility, especially in the winter months. Accessing the wrestling room through the locker room also poses logistical issues and might disrupt the flow of activities. Additionally, concerns arise regarding the training room, suggesting possible shortcomings that require attention. During games and events, the space often feels crowded, with limited room to maneuver, potentially impacting the overall experience for participants and spectators alike.

Fire and Safety

The building does not have a fire suppression system. At its current size, it would need an updated system with any additions or major modifications. Based on the occupancy, the exits from the building appear to be limited, with only three doors out of the main gym without exiting through another room or transiting up stairways. In the event of an emergency and a full gym of people, this would be a concern. The public restrooms in the entryway are too small for occupancy if the locker rooms are not publicly accessible.

Building Envelope

The overall age of the building is nearly 50 years old. For metal building construction of this vintage, that is reaching a point where roof replacement is needed, and interior insulation and wall panels are worn and damaged in some areas.

Structural

The gymnasium building's structural system is pre-engineered for metal building. The gymnasium, stage, and wrestling area are located on the ground level. The weightlifting area is on the second level floor behind the stage. There are no visual structural concerns in this area.

Roof Systems

Per the 2022 report provided by Heartland Roof Consultants, the roof is in fair condition but is nearing the point of needing replacement. Based on the age, we would agree with that assessment.

Security

There is no controlled access to the gym building other than locked doors. However, this is not unusual for a separate gym building. The access to the wrestling room through a locker room and access to training rooms creates concerns for security and liability.

Programming/Use

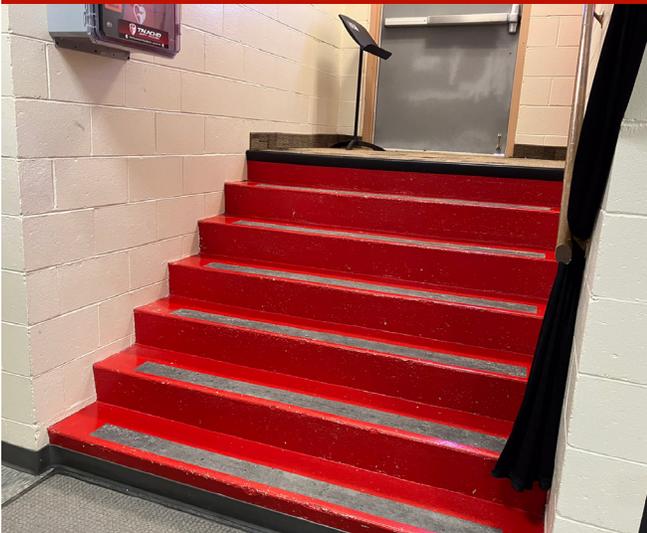
The overall space is good for the intended use, but the demand for the space is considerable given the number of activities and use demand for the space. There is continual disruption of normal use due to the high demand. The weight room is too small for most class sizes, and the amount of equipment in place is too. The space is not well suited for performing arts due to the small area of the stage, limited stage access (stairs only), and seating arrangements. No current space is allocated for girls' wrestling, but they have sometimes used the stage area. The locker rooms function relatively well and are in good condition.



Bleachers extended - close to floor edge.



Stage area.



Stairs to east/west exits.



Stair access to stage.



Locker rooms.



Wrestling room.



Weight room.



Locker room corridor to wrestling room.

Chapter Five: South Campus



Constructed	Size	Land	Grades	Students
2021	3,300-sf	0.5 acres	Preschool, K – 12 th	N/A

Architectural Assessment

The building was purchased by the district in 2021 after a local gas station/convenience store closed down their operations. The build was then remodeled to include a large meeting space, two classrooms, and public ADA restrooms.

Accessibility

The building is all on one level with adequate access to the main room and exits on the east and southeast sides. The finishes are updated and remodeled as part of the recent acquisition.

Fire and Safety

The building does not require a fire suppression system per code due to its size and occupancy. The overall exits are adequate for the use.

Building Envelope

The building is a metal building and is in good condition. There do not appear to be any weather instructions or concerns with doors or windows.

Structural

The south campus administration building is located on the south side of Niobrara Avenue. There are no visual structural concerns for the south campus administration building.

Roof System

The roof is a metal panel system that is original to the building. Based on the current age/condition, it does not appear to be a major concern. There is no report or documentation on this roof system available.

Security

The building does not have controlled access other than door locks. With the limited use and supervision of the space, the overall security does not appear to be a concern.

Programming/Use

The overall use of the building is well-suited for public meetings, staff training, and small teaching spaces. It is somewhat underutilized due to being across the highway, but the building functions well for its current use.



Main meeting room space.



Meeting room space.



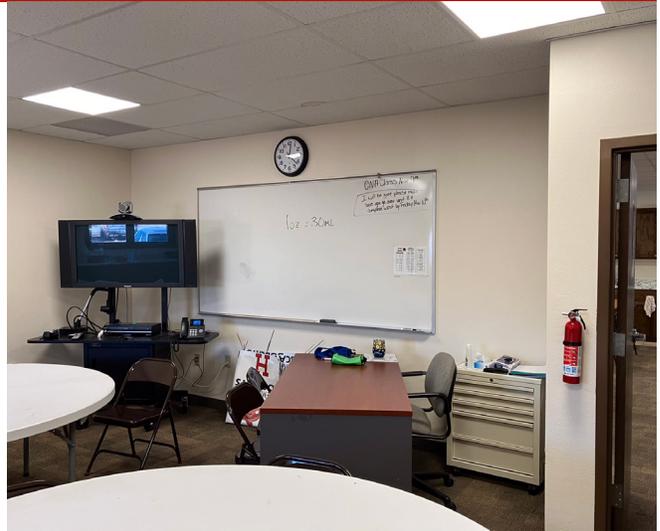
East classroom entry doors.



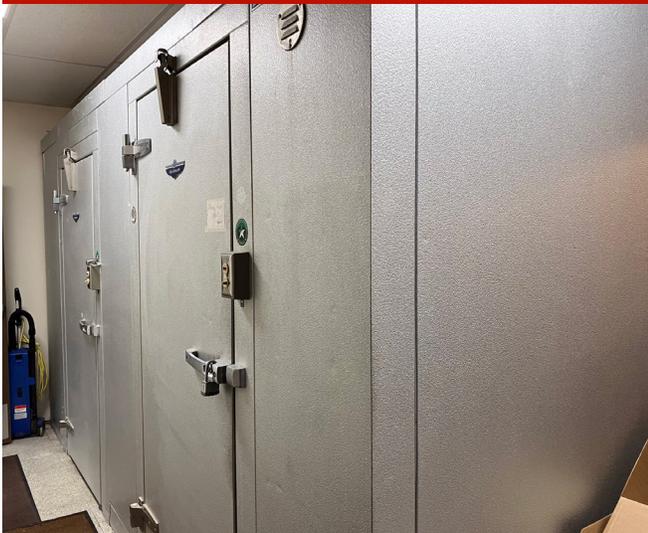
Alternative learning classroom and exit.



Current nursing classroom.



Current nursing classroom.



Walk-in cooler in southeast corner.



Walk-in cooler and south exit corridor.

Chapter Six: Shop Building



Constructed	Size	Land	Grades	Students
1991	5,000-sf	6.5 acres	7 th – 12 th	N/A

Architectural Assessment

The shop, built in 1991, was intended for use as a wood shop. It includes a paint booth, a welding area, and small classrooms/office space. Currently the space is also used for automotive/engine repair as well as wood shop, welding and classroom space. The paint booth is not in use; it is used for storage. Overall the space is adequate for the use, but it is very crowded in the classroom area. For the number of students and tables in the space, the area is very small. The shop area is very crowded and seems to be congested with equipment and project materials. The restrooms are adequate for the number of students but do not provide ADA accessibility.

Accessibility

Site access is difficult for anyone with limited mobility. In addition, the restrooms are not ADA-compliant. The door handles and access, in general, in the congested space, are not ideal for ADA use.

Fire and Safety

The close proximity of the welding and wood shop poses concerns about fire hazards. The building does not have a fire suppression system in the main shop area.

Building Envelope

The metal building was built at a lower construction cost but works well and appears to be weather-tight. The doors and windows appear to be original. Overall, it is in fair/good condition for its age.

Structural

The shop building structural system is a pre-engineered metal building. There are no visual structural concerns in this area.

Roof Systems

The roof is original to the building. It does not appear to have problems with water or weather intrusion. It is a metal panel roof system typical of pre-engineered metal building (PEMB) construction.

Security

The building, located separate from the main campus, still has locked doors and access control. However, communication during emergency drills or other communication needs from the main building is difficult. Communication system improvements are part of the upcoming improvement budgeted for the coming year.

Programming/Use

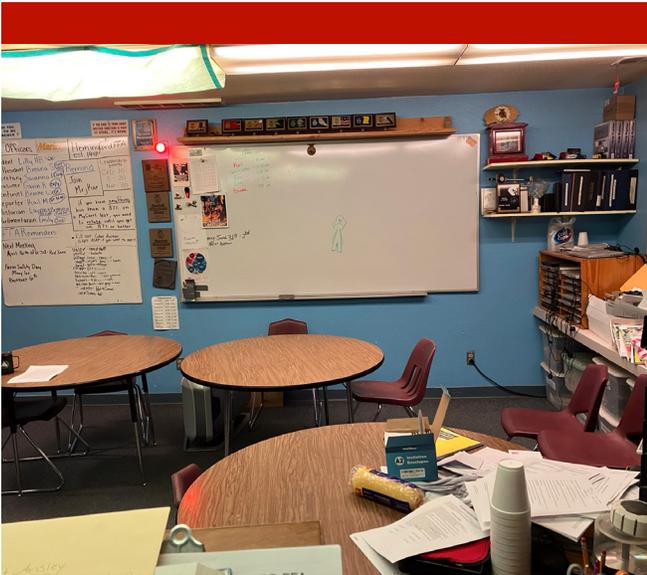
Overall, the use is generally good for shop space. The classroom space is very limited due to the size, and the overall area is very congested. Additional storage or expanded space for welding would be ideal but not necessarily required.



Shop area.



Shop area.



Classroom area.



Restrooms.

Chapter Seven: Support Buildings and Grounds



Constructed	Size	Land	Grades	Students
2016	N/A	6.5 acres	Preschool, K – 12 th	N/A

Architectural Assessment

The modular buildings have worked relatively well for their intended purpose. However, at this point, they are just well beyond their intended lifespan. The separation and access to the buildings are not ideal and create challenges for all students in winter weather and for any students with mobility difficulties. The units are also next to the playground and have a lot of noise and nearby distractions throughout the day. Modulares are typically very inefficient in energy use as well.

Booster club volunteers recently built the concessions building, and its overall function is well-suited for its use. The press box building and stands have been partially built

over the years by volunteers and/or school staff. The stands and press box are narrow and not easy to navigate. For the limited use, they are functional. There are several small storage buildings near the field as well that were not evaluated in detail. Typically, they function adequately for just storage but are not easy to access or convenient for use.

Accessibility

None of the previous-mentioned facilities are accessible with walkways, ramps, or other means. This is primarily a concern for the football stands as well as access to the stands, parking or walkways. There really is no easy access or ADA-compliant seating.

The concession building is large enough to accommodate ADA use, but the layout of the restrooms does not allow for enough clearance for one ADA stall. With some relocation of the partitions, one end stall could be available for ADA use, and this change would be recommended.

Building Envelope

Overall, the buildings at the football field (concessions and stadium press box) appear weather-tight and can be heated for use in the colder months. They are not intended for year-round use.

The modulars are in fair condition for their age and do not appear to have issues with weather. They are not ideal in terms of insulation and energy efficiency.

Structural

The modular classrooms were constructed in 1995 and 2001 and are located on the northwest side of the school complex. There are no visual structural concerns for the modular classrooms.

Roof Systems

The roof systems appear to be in good condition and not in need of replacement.

Security

Due to their limited use, these buildings are locked when not occupied and do not have any other means of security or monitoring.

Programming/Use

Overall, the buildings serve their purpose and are only used for limited times of the year. The modulars have served their purpose, but are well beyond the intended life and use.

The track facility is in very poor condition and does not work well for practice or training. It is well below standard or average condition.



Exterior of the modular structure.



ADA ramp on the exterior of the modular structure.



High jump mat.



Long and triple jump runway.



Stadium pressbox.



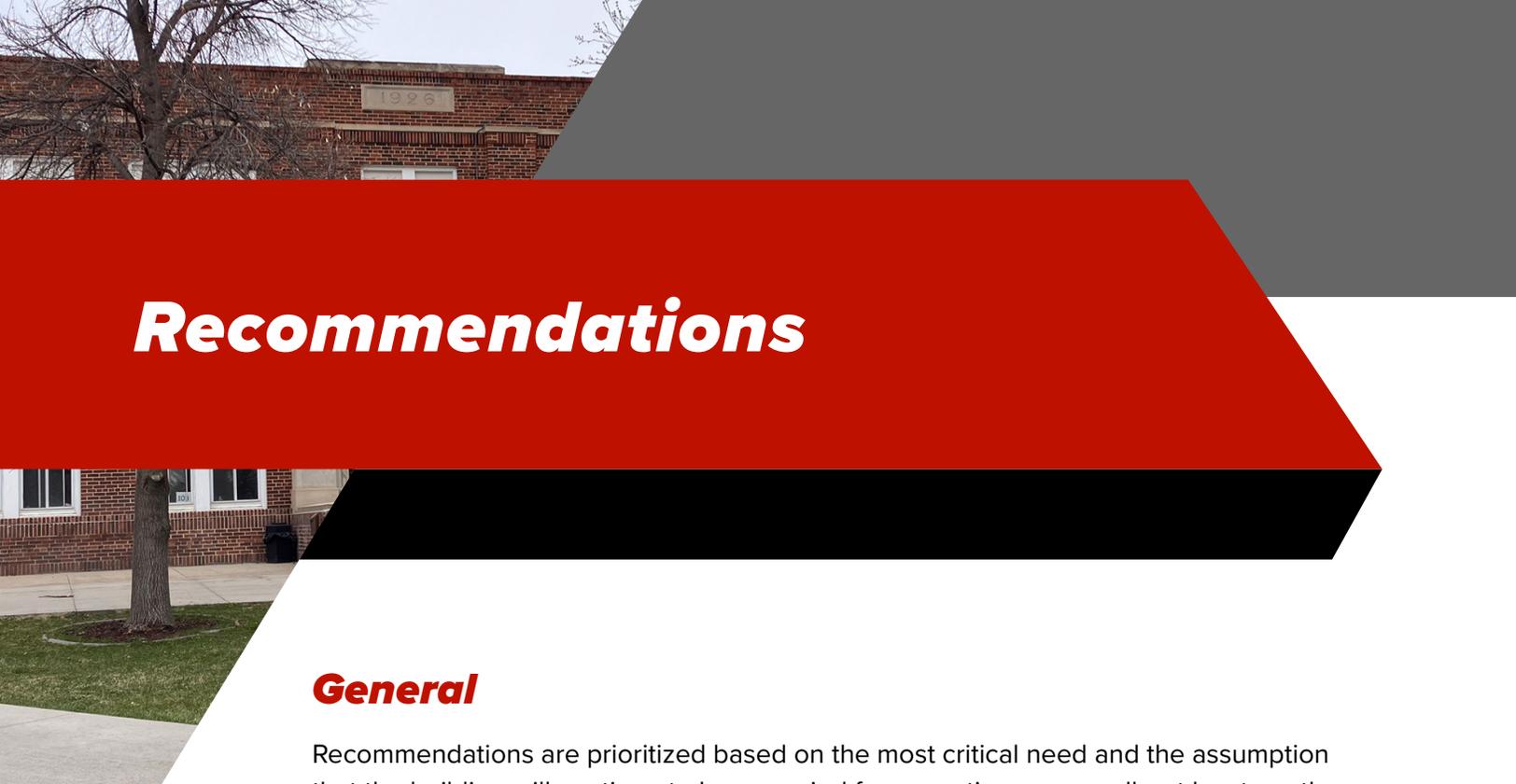
Interior of the stadium pressbox.



Concession stands.



Concession stands.



Recommendations

General

Recommendations are prioritized based on the most critical need and the assumption that the building will continue to be occupied for some time—generally, at least another 15-20 years or more. Overall improvements to the building should be weighed against the future intended use and life of the building as well. For comparison, we have provided approximate costs for new construction if facilities are replaced at some point and approximate costs for renovations to finishes. Cosmetic improvements are not considered a priority based on building use. Still, they should be weighed in the evaluation of the long-term use of the building and re-investment in finishes based on projected long-term use.

There are many deficiencies that are noted in the report but that are also not practical to fix without extreme costs or impact to the building. In these cases, a fix to these problems is not recommended, but they are noted to be aware of for possible liability concerns and in weighing future planning consideration of an older building and its deficiencies. It is not uncommon for older buildings to have elements that would not meet the current code. However, these limitations should be weighed when considering the long-term viability of a building. The replacement cost should be compared to both the long-term viability and maintenance costs of the existing structure, as well as the limitations in use and potential liability of the constrained functionality of current facilities.

Hemingford High School

(7th – 12th)

High Priority

Estimated Cost

Off-Street Parking/Access Drop-Off

\$50,000 - \$200,000

Medium Priority

Estimated Cost

Window Replacement

\$100,000 - \$150,000

Replace Original Doors

\$10,000 - \$20,000

Low Priority

Estimated Cost

Provide ADA Stalls Close to West Entry

\$3,000 - \$8,000

Plumbing in Science Room

\$5,000 - \$8,000

Additional Storage Shelving in Art/Science Rooms

\$10,000 - \$20,000

Replacement Cost Comparison:

\$10,500,000 – \$11,000,000

Note: Replacement costs are shown as a comparison only. This is not recommended based on the age/condition of the facility.

Hemingford Elementary School

(K – 4th)

High Priority

Estimated Cost

Replace 2nd Floor Classroom Areas

\$3,500,000 - \$5,000,000

OR Construction of a New Stairway and Elevator

\$1,900,000 - \$2,000,000

Medium Priority

Estimated Cost

Replace Interior Doors

\$20,000 - \$30,000

Low Priority

Estimated Cost

None

\$-

Replacement Cost Comparison:

\$9,500,000 – \$10,500,000

Note: Replacement costs are shown as a comparison only. This may be a consideration in the overall review of this facility.

Red Zone and Central Administration Building

High Priority	Estimated Cost
---------------	----------------

Expand Preschool Classroom	\$10,000
----------------------------	----------

Medium Priority	Estimated Cost
-----------------	----------------

None	\$-
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Low Priority	Estimated Cost
--------------	----------------

Provide Sound Damping	\$5,000 - \$10,000
-----------------------	--------------------

Replacement Cost Comparison:

\$5,000,000 – \$5,400,000

Note: Replacement comparison is only provided to show value if replacement was needed. It is not warranted or recommended based on the current use/condition of the building.

Gym Building

High Priority	Estimated Cost
Construct Addition (Weights, Reception, Restrooms)	\$2,200,000 - \$2,400,000
Construct or Partner for Multi-Purpose Space	Varies based on conditions

Medium Priority	Estimated Cost
-----------------	----------------

Install Stage Lift	\$10,000 - \$15,000
--------------------	---------------------

Low Priority	Estimated Cost
--------------	----------------

None	\$-
------	-----

Replacement Cost:

\$4,000,000 – \$4,200,000

Note: Cost is for a replacement of the building based on the same footprint. An additional gym to supplement the current facility could be built for less.

South Campus

High Priority

Estimated Cost

Construct Interior Offices for Administration Use

\$40,000 - \$50,000

Medium Priority

Estimated Cost

None

\$-

Low Priority

Estimated Cost

Parking Lot Improvements

\$30,000 - \$50,000

Replacement Cost:

\$1,000,000 – \$1,400,000

Note: Replacement comparison is only provided to show value if replacement was needed. It is not warranted or recommended based on the current use/condition of the building.

Shop Building

High Priority

Estimated Cost

Expand Classroom into Adjacent Storage

\$20,000 - \$30,000

Expand Overall Building for Added Use/Programming Needs

\$1,200,000 - \$1,500,000

Medium Priority

Estimated Cost

Install Walkways and Ramps to Building for Better Access

\$10,000 - \$30,000

Modify Restrooms for ADA Use

\$5,000 - \$8,000

Low Priority

Estimated Cost

Remove Clutter materials not in use to Reduce Fire Hazard

Labor Only

Replacement Cost Comparison:

\$1,500,000 – \$2,000,000

Note: Replacement costs are shown as a comparison only. This is not recommended based on the age/condition of the facility.

Support Buildings and Grounds

High Priority	Estimated Cost
Remove Visitor Bleachers	Labor and Disposal Costs Only
Provide ADA Parking and Walkways for Field	\$10,000 - \$20,000
Replace Home Bleachers and/or Add ADA Seating	\$10,000 - \$60,000
Remodel Concession Restrooms for ADA Use	\$500
Replace Modulars with Classroom Addition	\$2,200,000 - \$2,600,000

Medium Priority	Estimated Cost
Provide Track Improvements	Varies based on extent
<ul style="list-style-type: none"> ■ Runway and Jump Pits ■ Throw Improvements ■ Straightaway Track 	\$50,000 - \$100,000 \$2,000 - \$5,000 \$200,000 - \$400,000

Low Priority	Estimated Cost
Provide Site Parking Lighting	\$30,000 - \$40,000

Support Buildings and Grounds (Continued)

Replacement Cost:

\$1,200,000 - \$1,500,000

Note: Cost are for construction of a six- or eight-lane full track with jump pad, runways, pits, and other improvements for a competition-level facility.

Recommendation Summary

The overarching recommendation suggests the school district should assess a feasible overall project budget and subsequently prioritize needs accordingly. We understand the scope of improvements surpasses the capacity of a single project or bond effort. Therefore, an evaluation of needs should be conducted based on the district's sense of priority, with provisions made for future improvements as funding becomes available.

Based on a review of the facility assessment and a review of the feasible budget with the Board, the recommendation is to proceed with a concept planning phase that will further outline the scope of the proposed large project.

The project should include (based on the consensus of the Board and community feedback) the following general items:

Addition to the school to replace the modular classrooms

Addition to the school to replace the upper-level elementary classrooms

Addition of space for an expanded weight room

Demolition of the central admin building

Construction of a new kitchen and cafeteria space

Relocation of admin to the south campus building

Addition to include connection of the gym to the main building

Expansion of the shop/vocational education building

Further improvements to the buildings as outlined in the mechanical, electrical, and plumbing report.



Appendix 1

Feedback from staff, students and public meetings

Public Comments

What elements of school work well:

Red Zone area

South Campus meeting space

Connectivity of buildings

Main controlled entry

What areas are most concerning to you:

Crossing the highway with kids

Playground drainage

Limited gym space

Elementary ADA compliance

Wrestling space - small and access through locker room

Access to training room

Elementary school classroom size

What are some underutilized spaces:

South campus due to access

Front courtyard

What is most important to you:

Safety - vestibule control, cameras, and target hardening

Traffic safety

Having the right tools to educate

Sustainability - taking care of what you have for future

Are there portions of the school that limit education or programming because of the condition or lack of space:

Lack of specials or individual breakout space	Elementary lunch space too small
Art room cramped and congested	Science room lack of plumbing
Gym in high demand	Weight room too small
Shop area too small and lacking proper classroom space	No SPED, intervention, or counseling spaces

What are some underutilized spaces:

South campus due to access	Front courtyard
----------------------------	-----------------

What are some wish list items:

Added gym space	Girls wrestling space
Performing arts space	Additional classrooms
Counselor dedicated space	Improved nurses office
Larger pre-school room	Parking improvements
Girls restroom in lobby too small	Locker room for football
Daycare space	Main entry off the highway
ADA access to elementary	Track facility
Front courtyard	More secretary space
Lack of storage	Life skills room

Student Comments

Grade 2

Good	Bad	Wishlist/Priority
Playground	Small classrooms	Water slide
Cafeteria/food	Cafeteria tables	Baseball field
Art room	More lockers	Volleyball
Elementary gym	Too hot/cold	Two-square
Library	Mud on playgrounds	Elevator
	Furniture/desks	Gaming room

Grade 3

Good	Bad	Wishlist/Priority
Upstairs view	Small classrooms	Bigger gym
Computer room	No gym connect	Softball space
Gym	No fence	Connection to gym
Playground	No sink by cafeteria	Soccer nets
Food	No elevator	Volleyball nets
Library	Balls are flat	
	Cramped storm shelter	
	Small SPED rooms	
	Art crowded	
	High school halls crowded	
	Wrestling too small	

Grade 4

Good	Bad	Wishlist/Priority
Upstairs view	Small classrooms	Bigger classrooms
Kickball	No drinking fountain in gym	Bigger lunchroom
Football field	Small lunch tables	Elevator
Gym	Wrestling room too small	
Music room	Heater/AC system	
Ramps for modulars	No track	
Bus drop off	Art room far and passing time	
	Bigger stage	
	No elevator	
	Tech room too small	
	No goal posts	
	No fence - dogs	

Grade 5

Good	Bad	Wishlist/Priority
Football	Playground mud	More space
Kickball	Loud outside modulars	Sound in modulars
5 th and 6 th separate	Tree stump	Inclusive play
	No inclusive play equipment	ADA swing
	No volleyball	
	No gaga ball	
	Some equipment not used	
	Small classrooms	
	Narrow areas for ADA	
	Storage	
	Crowded serving line and tables	
	Crowded gym for concerts	
	No elevator	
	Art too crowded	
	Wrestling too small	
	Gym tight on sidelines	

Grade 6

Good	Bad	Wishlist/Priority
Ramps	Elementary stairs	ADA
Larger classrooms	No connection to modulares	Wresting space
Red Zone	No secure playground	Football field divots
Art and band	Drainage and mud	Bball floor – slick
Bottle fillers	Wrestling room too small and poor ventilation	Sports equipment
High school bathrooms	Modular bathrooms	Inclusive playground
High school accessibility	No track	
Kickball	Bigger gym and bathrooms	
5 th and 6 th separate	Locker rooms cramped (MS)	
	No volleyball outside	
	No full court basketball	

Grade 7

Good	Bad	Wishlist/Priority
Classroom size	Shop class size	Heating/cooling in elementary
FCS Room	Gym entryway	Wrestling ventilation
Red Zone	Wrestling room access	
Main Gym		
High school accessibility		
Courtyard area		
Football field		
Kickball		
Music room		
Library		

Grade 8

Good	Bad	Wishlist/Priority
Larger classrooms	Modular access	Bigger gym
Red Zone	Art cluttered	Weight room larger
Locker rooms	Shop building too small & winter access	Better AC – high school
Bus drop off	Gym entry too small	Elementary ADA
Courtyard	Football stands in poor shape	Track – big priority
Elementary library	Wrestling room too small and poor ventilation	
Bottle fillers	Elementary HVAC	
High school bathrooms	ADA – Elementary	
High school accessibility		
Kickball		

Grade 9

Good	Bad	Wishlist/Priority
High school classrooms	Modular RR	ADA elementary
Red Zone	Access to Elem & Mod	Larger gym or auditorium
Lockers	Modular noise	Shop for welding separate
Music room	Weight room	
Playground	No event space	
Football field	Gym entry too small	
Track storage	Gym tight w/ bleachers	
Library	Shop building too small	
High school bathrooms	No track	
High school accessibility	South campus could be used more	

Grade 10

Good	Bad	Wishlist/Priority
High school accessibility	Access to elementary and modulars	Auditorium/Multi-Purpose space
Red Zone	Weight room	Wood floor
Connectivity	No event space	Elevator
Lockers	Gym connection	Weight room
Shop area	Round about pole	
High school bathrooms	Lack of event space	
	Art room	
	Parking	
	Wrestling access	
	Gym tight w/ bleachers	
	Shop access	
	Gym entry too small	
	No track	
	South campus could be used more — Access to ADA students	

Grade 11

Good	Bad	Wishlist/Priority
High school accessibility	Science room lacking sink	Elevator
Red Zone	Shop class crowded	Weight room
Clean locker rooms	Gym overbooked	Wrestling space
Classroom sizes high school	Gym tight w/ bleachers	Multi-purpose or auditorium space
DL space	Gym entry	
Bus drop off	Wrestling access	
High school classrooms	Weight room too small	
High school bathrooms	Odors under modulars	
	Gym overbooked	
	Elem. classrooms	
	Football stands	
	No track	
	No track	

Staff Comments

Music Room

Low light entry, bad carpet, wasps, water in corner.

No performance space. No ADA stage.

Storage lacking.

Sink would be nice.

Lacking outlets.

Ceiling is dirty.

Modulars

Get rid of them!

Counselor sees problems with isolation of 5-6 grade.

Do like temp control and Like size of rooms.

Red Zone

Safety concern – 2nd set of doors to control entry (district is working on this. Given grant money for this and key card system).

Blinds would be good for upper windows.

Loud and echoes – indoor recess loud. Sound mitigation would help.

Administration Building

Can be loud.

Need outlets, and often cold in room.

Like sink access.

Sound and security very bad.

Kitchen and Cafeteria

Small.

Visibility is not good to cover both areas.

Too small and noisy.

Staff Comments

South Campus

General good space.

Access across highway is challenging for some.

Parking

Generally lack of parking – no onsite parking.

Would like staff parking.

No parking for teachers – dedicated.

Bus drivers – issue for parking and turnaround

Ag Shop and Classroom

Very small classroom.

Access on ice/snow a concern.

Playground

Muddy.

Inclusive play needed.

No storage for equipment.

Really dark in area between buildings at night.

Need fence; need security.

Football Field and Track

No ADA restroom or seating.

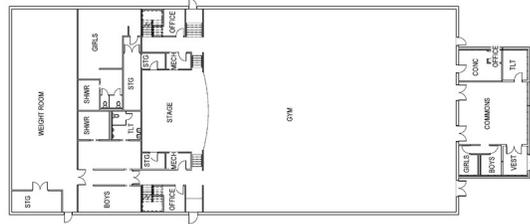
Jump pit or one runway would be nice even with just small area.

NO ADA walks, seats, etc.

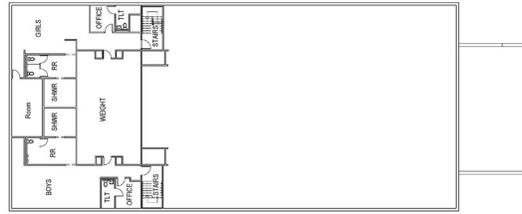


Appendix 2

Building floor plans



① EXISTING FIRST LEVEL FLOOR PLAN - GYM
10-2-10



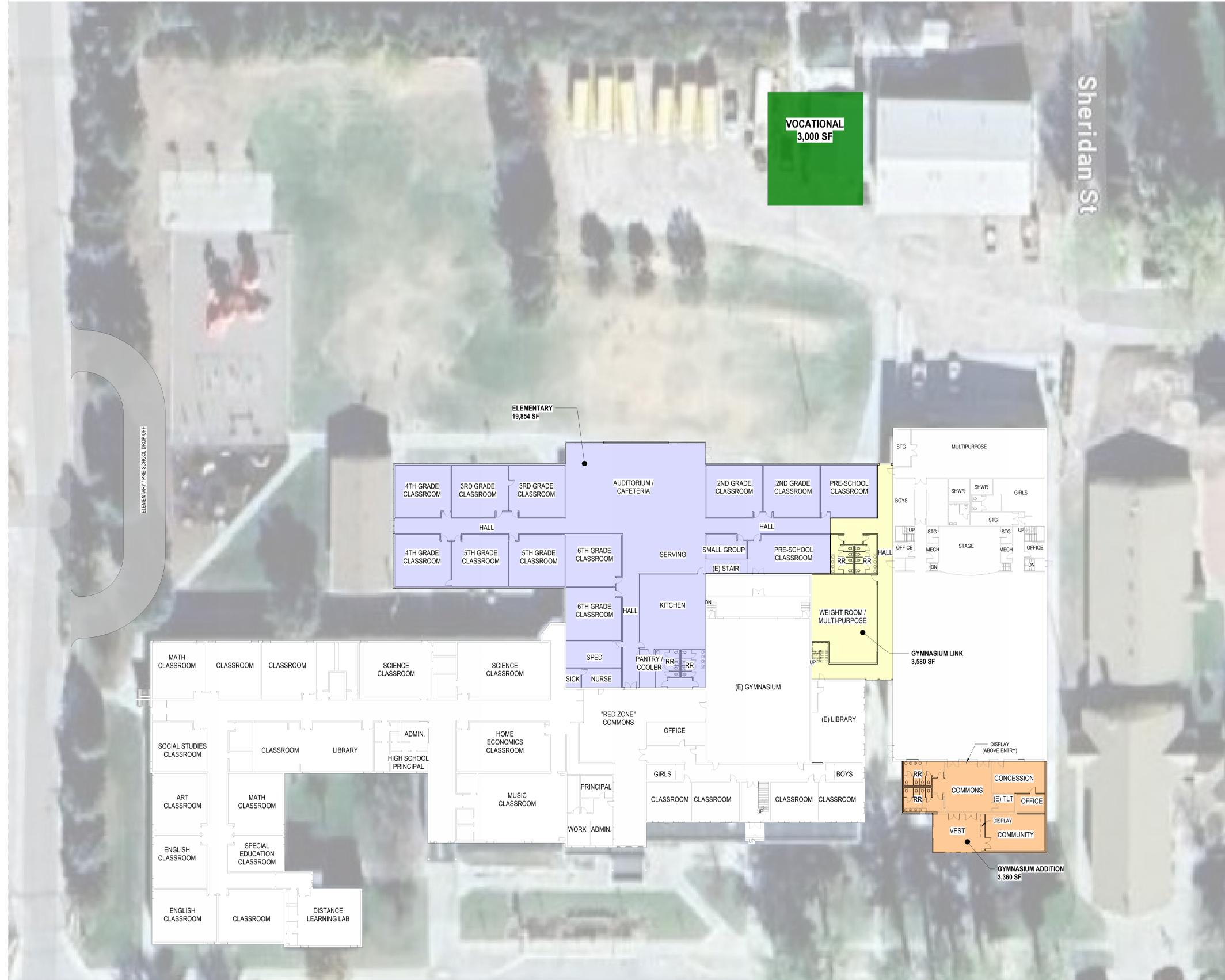
② EXISTING SECOND LEVEL FLOOR PLAN - GYM
10-2-10



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FIRST FLOOR PLAN
3/64" = 1'-0"

HEMINGFORD PUBLIC SCHOOLS

JEO Project No.: 231859.00

JEO ARCHITECTURE INC

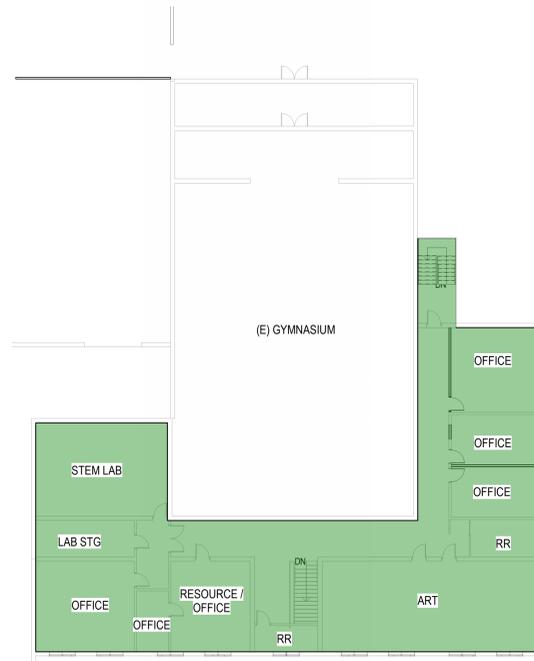
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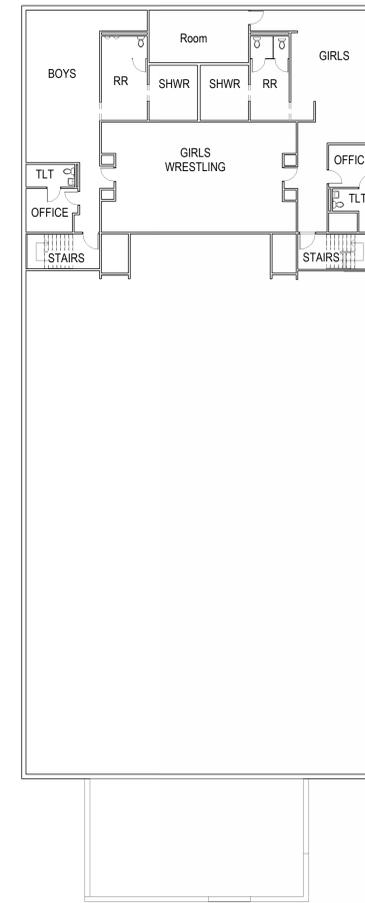
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1 SECOND FLOOR PLAN - SCHOOL
 1/16" = 1'-0"



2 EXISTING SECOND LEVEL FLOOR PLAN - GYM
 1/16" = 1'-0"

Hemingford Concept Plan - Preliminary Cost Summary

9/10/2024

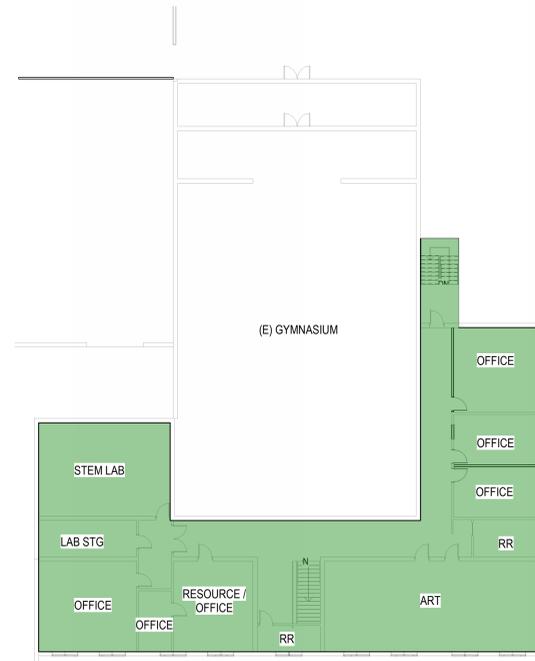
	SF	Cost/SF Low	Cost/SF High	Total - Low	Total - High
Classroom Addition	19,854	\$ 400.00	\$ 500.00	\$ 7,941,600.00	\$ 9,927,000.00
Gym Connection Link	3,580	\$ 400.00	\$ 500.00	\$ 1,432,000.00	\$ 1,790,000.00
South Gym Entry Addition	3,360	\$ 320.00	\$ 375.00	\$ 1,075,200.00	\$ 1,260,000.00
Shop/Vocational Addition	3,000	\$ 200.00	\$ 250.00	\$ 600,000.00	\$ 750,000.00
Demo & Civil/Site Work	1	\$ 900,000.00	\$ 1,200,000.00	\$ 900,000.00	\$ 1,200,000.00
Contingency	15%			\$ 1,792,320.00	\$ 2,239,050.00
TOTAL CONSTRUCTION ESTIMATE				\$ 13,741,120.00	\$ 17,166,050.00



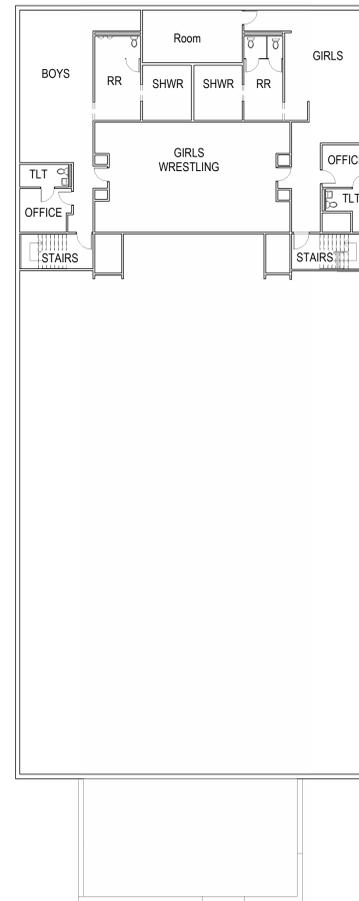
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1 SECOND FLOOR PLAN - SCHOOL
1/16" = 1'-0"



2 EXISTING SECOND LEVEL FLOOR PLAN - GYM
1/16" = 1'-0"